

REPORT  
ON THE  
SANITARY ADMINISTRATION  
OF THE PUNJAB

AND  
PROCEEDINGS OF THE SANITARY BOARD  
FOR THE YEAR 1904,

BY  
LIEUT.-COLONEL C. J. BAMBER, I. M. S., D. P. H., CAME.,  
FELLOW OF THE ROYAL STATISTICAL SOCIETY,  
*Sanitary Commissioner, Punjab,*

AND  
THE REPORT ON SANITARY WORKS  
FOR 1904.

MR. C. E. V. GOUMENT, A.M.I.C.E.,  
*Sanitary Engineer, Punjab.*

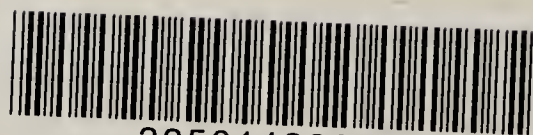
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No Remarks.

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## **Section III.—Native Army.**

No Remarks.

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## **Section IV.—Jails.**

No Remarks.



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READ—

Report on the Sanitary Administration of the Punjab and Proceedings of the Sanitary Board for the year 1904 by Lieutenant-Colonel Bamber, Sanitary Commissioner, Punjab, and Report on Sanitary Works in the Punjab for 1904 by Mr. C. E. V. Goument, Sanitary Engineer, Punjab.

REMARKS.—The vital statistics of the Punjab for the year 1904 are dominated by plague in even a greater degree than those of the previous year. In other respects 1904 was a healthy year, unmarked by any unusually disturbing factor. The autumn monsoon was intermittent and somewhat lighter than usual; there was no serious outbreak of malarial fever such as marked the autumn of 1903, and there was very little mortality from either cholera or small-pox. Prices on the whole were lower than in the previous year, and the crops—more especially the *rabi*—were in many districts above the average. Conditions were therefore favourable for a recovery from the heavy death-rate and the somewhat low birth-rate of 1903. The Report shows, however, that the death-rate actually rose from 49·0 per mille to 49·06 per mille, while the birth-rate fell from 42·9 per mille to 41·5 per mille. Of the deaths no less than 19·7 per mille were due to plague (as against 10·2 per mille in 1903) and the average apart from plague was therefore 29·36 per mille only. The average for the healthy years 1898 and 1899 was 29·3 and 28·0, and the mean average of the quinquennial period 1898—1902 (including the figures for plague) was 36·7. It is clear therefore that, but for the prevalence of plague, the year might have been described as a healthy one. Plague, it may be noted, caused no less than  $\frac{2}{5}$ ths of the total death-rate of the year, and the total number of deaths (396,357) is not only nearly double that of the previous year, but exceeds by 6,825 the total mortality from plague registered between October 1897 (when the first outbreak occurred) to the end of 1903.

2. The birth-rate, 41·5 per mille, while lower than that of the previous year (42·9 per mille), is practically the same as the mean average (41·4 per mille) recorded in the preceding quinquennial period. This average is, however, a low one, as it includes the bad years 1900 and 1901, when the birth-rate was, owing to the effects of cholera, famine and malarial epidemics, registered as 38·3 and 35·4 only. The average in the healthy year 1899 was 46·2. The Punjab birth-rate is now lower than that of the Central Provinces, the United Provinces, and Bengal. The Sanitary Commissioner is no doubt right in attributing the low average birth-rate in what was otherwise a distinctly favourable year to the effects of plague, but the unusual autumnal sickness of 1903 was also no doubt largely responsible. There would seem to be no satisfactory explanation of the unusually low birth-rate in Gujrât noticed in paragraph 1 of last year's Review.

3. The births in municipal towns were registered at the rate of 39 per mille during 1904, or in the same proportion as in 1903, being 3 per mille less than in rural circles. The death-rate was 46·74 per mille (being 6·15 less than the previous year) as against 49·31 in rural circles. The improvement in the health of municipal towns would appear to be due to a decrease in mortality from fevers. At the same time it must be noted that the municipal death-rate from plague increased by 5·05. On the whole, the plague returns for the municipal towns (14·09 per mille) continue to compare very favourably with those recorded in rural circles (20·34 per mille), and it is noticeable that the largest urban mortality occurred in the smaller Municipalities. In the four largest towns the plague rate is again comparatively low, being only 1·29 per mille in Delhi, 9·37 in Lahore, 6·85 in Amritsar, and almost *nil* in Multán. The comparatively low birth-rate in towns is attributed by the Sanitary Commissioner partly to the fact that registration is more defective than in rural circles; but allowance must also be made for the difference in the composition and habits of the urban population.



4. The provincial birth-rate of 41·5 per mille includes 21·7 of males and 19·8 of females. There does not seem to be any reason for the exceptionally low percentage of female births in Shahpur and Dera Gházi Khan, except that given by the Sanitary Commissioner, namely, the omission of female births from the registers as matters of no importance. The female death-rate is 54·37 per mille as against a male death-rate of 44·47. A considerable part of the excess of female over male deaths seems due to plague, which accounted for 23·41 per mille of female deaths as against 16·52 in the case of males. The higher mortality of females from plague now seems to be a well established fact, and the Officiating Lieutenant-Governor will be glad to receive the report on the subject to which the Sanitary Commissioner alludes in his paragraph 21.

5. The facts regarding the variation of death-rates at different ages brought together in paragraph 21 of the Report are of considerable interest. The infantile mortality during the year was very moderate, and it is noteworthy that it was actually less than last year in the districts in which plague caused the highest mortality. The Sanitary Commissioner seems to have good grounds for his conclusion that the infant population remains unaffected by plague, but the matter is one which can hardly be definitely settled without more detailed examination. Jullundur, Amritsar and Ludhiána Districts show (as last year also) a considerable excess of female infantile mortality.

6. The figures quoted in paragraph 22 of the Report (which may be compared with those given in the corresponding paragraph of last year's Report) would seem to show that there is no regular ratio between Hindu and Muhammadan mortality, the variations in which are dependent entirely on local circumstances. It is clear, however, that in districts which are badly infected with plague the average of Hindu mortality is generally less than that of Muhammadan. This was the case in every district of the Punjab which was marked by a heavy plague mortality in 1904, with the exception of Siálkot. It is doubtful whether this is due to the greater immunity of urban populations—which in many of the districts affected last year contain a strong preponderance of Hindús—or to a difference in habits and intelligence. The matter seems one for separate enquiry, and the promised report will be awaited.

7. The figures contained in paragraphs 25—38 of the Report show that the Province remained practically free from *cholera* during the year, the total mortality being 716 only. The deaths from *small-pox* were also less than in the previous year. A separate enquiry should be made in order to see whether the Vaccination Act is properly enforced in the town of Rohtak, which had an unusually high mortality from small-pox. There was a marked reduction in the mortality under the general head *fevers*, and the rate (18·82 per mille) was about equal to that of the healthy years 1895 to 1899. Very little has been done during the year in the direction of filling up pools and swamps near towns. Deaths from *dysentery and diarrhæa* fell as usual in proportion to the deaths from *fevers*; while those from *respiratory diseases* also declined. The figures relating to the latter are not, however, altogether trustworthy, owing to their confusion with the returns relating to the pneumonic form of plague.

8. The facts relating the progress of the plague epidemic are fully dealt with in paragraph 31 of the Report, and the effect of the outbreak on the vital statistics of the Province has been already dealt with in the preceding paragraphs. The people remained on the whole apathetic in their attitude to the precautions advocated by Government. Comparatively few presented themselves for inoculation; the isolation of the sick and separation of contacts was seldom resorted to, and the inhabitants of uninfected villages in very few cases exercised their right to exclude persons coming from infected centres. In the present attitude of the people little or nothing can be done to help them during the progress of an epidemic. During the present year 1905 an experiment in the destruction of rats is being carried out on a considerable scale in the Delhi District, and the Officiating Lieutenant-Governor awaits the result with interest.



9. The Officiating Lieutenant Governor has had under his consideration the question of how far the figures for death from plague can be accepted as accurate. They are compiled from the reports of an ignorant agency ; and though care is taken in the compiling office to make such inquiries as may be possible wherever the figures suggest doubt, yet it seems not improbable that, while at the commencement of an outbreak the numbers reported are probably in defect, yet when once the epidemic is established in a town or village, the figures are unduly swollen by the mistaken attribution of deaths to plague. The diminution in the death-rate from fever which is alluded to in paragraph 32 of the Report, and the fact that the larger the centre (and therefore, presumably, the greater the average intelligence) the smaller is the reported death-rate from plague, seem to lend support to this suggestion.

10. His Honour has not the smallest doubt that the figures faithfully represent the general course of the epidemic. The worst plague months are not the worst fever months ; and the presence or absence of the disease in a given place is probably unmistakeable, even by the ignorant. But these considerations do not exclude the possibility that, wherever plague is present, the number of deaths attributable to it are exaggerated in the manner just suggested ; and Sir Denzil Ibbetson would be glad if Civil Surgeons and Plague Medical Officers would pay special attention to this point, should the epidemic recur next year. In doing so, great care must be taken to avoid creating the impression that Government considers the figures, as at present reported, too large. To do this would at once introduce a far more potent source of error than at present exists. What is desired is not so much to insist upon greater strictness of classification as to ascertain how far any laxity of the classification, as conducted upon existing lines, tends to exaggerate the true figures.

11. With reference to what was said in paragraph 4 of last year's Review regarding fines inflicted in Municipalities on defaulters in the matter of registration of births and deaths, it is noted that the number of fines inflicted in 1904 shows an increase from 149 to 214 ; whereas no fewer than 25,000 omissions were detected by actual inspections within Municipal areas. The fines, moreover, work out at an average of Re. 0-13-0 only. It is obvious that the matter has not received sufficient attention, and it is clear that no good effect can be produced by the imposition of purely nominal fines. The attention of District Magistrates is drawn again to the necessity for punishing defaulters in this respect.

12. Some progress was made during the year in the protection and clearance of wells, but the offer of rewards by District Boards in order to encourage village sanitation does not seem to have passed the stage of discussion. The proposal to give grants-in-aid for village improvements, sanitary and otherwise, to villages on the Chenab Colony is now before the Sanitary Board. A scheme put forward by the Amritsar District Board to tax the larger villages for the promotion of sanitary improvements is being considered by Government.

13. The Sanitary Board has already been given authority to make grants-in-aid out of the sum placed at its disposal for this purpose. The Board continues to show a satisfactory outturn of work.

14. The Sanitary Engineer submits a report showing the sanitary works of which he has supervised the construction or for which estimates were prepared by him. The Amritsar Water-Works have now been completed at a cost of over ten lakhs, and the new Simla Sewage Extension works have also been completed and opened. Other important works were the intra-mural drainage works at Delhi and the extension of the Ambála City water-supply. The Officiating Lieutenant-Governor is glad to note that there is also some prospect of the Ludhiána Water-Works being now taken in hand. The attention of Commissioners is drawn to the remarks contained in paragraph 13 of Mr. Goument's report regarding the necessity for encouraging Municipal Committees to dispose of their sewage by land irrigation.

15. The Officiating Lieutenant-Governor desires to thank Lieutenant-Colonel Bamber and Mr. Goument for the reports submitted and the work done by them during the year.

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ORDER.—Ordered that a copy of the foregoing remarks be circulated with the Reports and be furnished, with the usual numbers of copies of the Reports, to the Government of India ; also that the Review be published in the *Punjab Government Gazette*.

Ordered also, that a copy be forwarded to the Sanitary Commissioner, Punjab, for information.

By order of His Honour the Lieutenant-Governor,

W. M. HAILEY,

*Officiating Secretary to Government, Punjab.*

#### ERRATA.

1. Annual form No. I, District Gurgaon, sub-column 15, *for 23·3 read 22·3.*
2. Annual form No. II, District Montgomery, sub-column 26, *for 5 read 29·5.*
3. Annual form No. IV, District Karnal, sub-column 20. *for 1 16 read 1,216.*
4. Annual form No. VI-A, Rural Circles, District Attock, sub-column 24, *for 8·33 read 5·33.*
5. Section VI—Chief diseases, para. 28, mortality by districts, *instead of nine read eight of them did not exceed 0·1 per mille.*
6. Para. 35, Respiratory diseases, marginal note, *read Annual forms Nos. II and VI A and B.*





## Section V.—Vital Statistics.

THE vital statistics that have to be reviewed this year are much of the same character as those of last year, if the general result is considered. The total mortality is the same, but this is brought about in a different way. The great fatality caused by plague is the chief feature in this year's statistics, but for that, this would have been a healthy year. Malarial fever, which was last year the principal cause of a high death-rate, has been but little prevalent. The reason for this the meteorological observations show to be a deficiency in the rainfall last summer. Our knowledge of the cause of malarial fever enables such a statement to be made. Unfortunately science has not yet succeeded in giving a reason for the spread of plague. This disease has gone on increasing year by year, and in this Province there is nothing to show that it has reached its maximum. In other provinces, where it has been longer established, the general opinion is that plague increases and decreases in alternate years. If this should prove to be the rule in this Province, it is to be hoped that next year the death-rate of plague will be lower. No satisfactory reason has yet been given for this rise and fall in intensity. To inquire into and elucidate such points in the etiology of this disease a Commission of experts from England has been appointed.

2. The following brief summary of the chief meteorological features of the Punjab during 1904 has been furnished by the Meteorological Reporter to the Government of the Punjab :—

Disturbed unsettled weather prevailed during the closing days of 1903 and these conditions continued over the Punjab from the 1st to the 19th January 1904. During these three weeks showers of rain occurred over the plains and of snow on the hills. The fall prevailed fairly continuously, but was heaviest between the 13th and 15th, when over an inch of rain fell over a large part of the Province. The weather during this time was cooler than usual and temperature remained low until the 23rd. The rainfall of the month was less than the normal in the east, but was excessive elsewhere. On the 20th of January the weather cleared and, with the exception of a little snow on the hills and occasional showers in the submontane districts, remained fine till the end of February. The rainfall of February was everywhere below the normal, on the hills largely so—and the mean temperature was higher than usual. March was a disturbed month and heavy rain was received between the 1st and the 9th, and the 21st to the 27th. The day temperatures were lower and the night temperatures higher than usual, so that the daily range of temperature was less than the average, but the mean temperature was lower than usual everywhere. The month's rainfall everywhere exceeded the normal, more particularly at Siálkot (5·73" instead of 1·14") and Lahore (5·37" instead of 0·65"). The weather was generally finer and drier than usual during April and May. The rainfall practically everywhere was lighter than usual in April, but during May thunderstorms occasioned some excess of rain over the east Punjab. The mean temperature during these two months varied irregularly from the normal and the highest temperatures recorded were :—In April 107°·9 at Multan on the 26th, and in May 116°·8 at Montgomery on the 22nd. There was no advance of monsoon winds into the Punjab during June, and the scanty and deficient rainfall which was received fell during occasional thunderstorms. The weather was, with the exception of the brief periods of disturbance, hotter than usual—more particularly towards the close of the month. The highest temperature recorded was 116°·3 registered at Montgomery on the 21st and at Khushab on the 28th.

During the monsoon months of July, August and September the rainfall was intermittent and generally lighter than usual. There was a large local excess at Simla in July, and at Delhi in September, but generally speaking the monsoon rainfall over the Punjab was scanty and deficient though over the east of the Province the fall continued as late as the 19th. The mean temperature though very unsteady was generally more or less excessive from the beginning of July to the 12th of September when a sudden fall set in. The highest temperatures recorded were: in July 112°·4 at Multan on the 8th; in August 109°·3 at Khushab on the 18th; and in September 109°·4 at Multan



on the 12th. In October the weather was showery over a considerable part of the Province, so that though there was no rain in the Multan, Khushab, Montgomery and Delhi districts the small normal fall of the month was exceeded at some other stations. The mean temperature of the month was generally higher than usual, and at Multan temperature rose to  $105^{\circ} \cdot 4$  on the 8th. During November there was one period of general showers, the weather during the remainder of the month having been fine. During this showery period rain fell at all stations, except Sirsa, and exceeded the small normal fall in many districts. The air was much damper than usual and the mean temperature was above the normal almost everywhere. This excess was due to high night temperature; the day temperatures having been lower than usual at practically all stations. The weather was more disturbed than the average during December and there occurred one prolonged showery period between the 11th and the 18th. As in November the mean temperature generally exceeded the normal, due mainly to high night temperatures, the mean day temperature having been in defect at the majority of stations. As was the case in the preceding month the air was unusually damp throughout the Province.

3. The retail price of wheat was about 16 seers per rupee during the year at Dehli, a little over 17 seers at Lahore and Rawalpindi and 15 seers at Multan, being somewhat cheaper than in 1903. As regards other staple food grains, the rates were much cheaper. The price of barley during the year was about 26 seers at Delhi, about 30 at Lahore, 25 at Multan and 28 at Rawalpindi, that of *jowar* was a little over 25 seers at Multan and Rawalpindi and 27 and 29 seers at Delhi and Lahore; the rate of *bajra* varied between 21 and 23 seers; the price of maize was nearly 32 seers at Lahore, 28 at Delhi and a little over 24 at Multan and Rawalpindi, and that of gram ranged from about 23 to 26 seers at the principal markets. The rates of wages differed slightly from those of the previous year, excepting a few districts. In Ferozepore, Lahore, Sialkot and particularly in Gujranwala the wages of common masons, carpenters and blacksmiths were much higher and in Muzaffargarh the rates fell considerably.

4. **Births.**—The total number of births registered in the Punjab in 1904 corresponds to a rate of  $41 \cdot 5$  *per mille* of the population according to the census of 1901. This rate is practically the same as the mean ratio of  $41 \cdot 4$  recorded in the preceding quinquennial period, there being an insignificant difference of  $0 \cdot 1$ . Since 1902 the provincial birth-rate has gradually declined from  $43 \cdot 8$  in that year to  $42 \cdot 9$  in 1903 and to  $41 \cdot 5$  in 1904. It is, however, worthy of note that, in spite of the severe prevalence of plague, the birth-rate remains fairly high. The reason for this is, that in every other respect the conditions during the last three years have been very favourable. As regards food supply, the period has been one of general prosperity, the rates of food grains have been normal. Moreover there has been no epidemic of malarial fevers of unusual severity. This was the case in 1899, when under somewhat similar circumstances, the birth-rate calculated on the population of 1901 was as high as  $46 \cdot 2$  *per mille*. And I have no reason to doubt that, had the Province been free from plague, there would have been a marked increase in the birth-rate.

5. The Central Provinces show a remarkably high birth-rate of  $53 \cdot 19$  in 1904. The rapid increase in their birth-rate after the great famine of 1900 is most noticeable, and it would appear fair to imagine that in the Punjab the same rapid increase would have taken place unless plague had stepped in to prevent it. The United Provinces show the next highest rate of  $46 \cdot 67$  or about as high as in the previous year. Bengal comes next, but its rate of  $42 \cdot 59$  is only slightly in excess of  $41 \cdot 5$  recorded in the Punjab. The remaining provinces show the following rates:—Madras  $39 \cdot 57$ , Assam  $35 \cdot 55$ , Bombay  $35 \cdot 09$ , North-West Frontier Province  $34 \cdot 93$ , and Burma  $32 \cdot 71$ . The birth-rate of England in 1902 was  $28 \cdot 5$  *per mille*.

6. Comparing the birth-rates, district by district, in each Division of the Province, it appears that the proportion of births registered during the year in Hissar, Rohtak, Gurgaon and Delhi is considerably above the average, there being a substantial increase ranging from 4 to about 7 *per mille*. The rates are now about as high as



they used to be formerly, which means that these districts have almost fully recovered from the effects of the last famine. Unfortunately plague has made its appearance recently in a severe epidemic form in some of these districts, and it is doubtful whether a high standard of birth-rate will be maintained in the future. The birth-rate of Karnal is about the average, but it is much lower than in the districts named above, probably on account of the greater prevalence of malarial fevers in the preceding autumn. The rate in Ambala remains low, as compared with the average of the district as well as of the Province. Ambala has been among the greatest sufferers from plague and there is no doubt it has lost a large number of child-bearing women. The small birth-rate in the Simla district is owing to the migratory population of the sanitarium which consists of fewer women.

7. The birth-rate of Kángra is a little over the average. The rate in this district is usually low for reasons stated in previous reports. The birth-rate of Hoshiárpur differs but slightly from the normal, that of Jullundur is somewhat lower, but it is very much below the average in Ludhiána, one of the worst plague infected districts in the Province. Ferozepore is the only district in the Jullundur Division in which the birth-rate exceeds the normal to any great extent, probably on account of plague being much less prevalent in that district.

8. In the Montgomery district, which has hitherto remained practically free from plague, the ratio is higher than the normal. In the other districts, all plague infected, the birth-rate has declined except in Lahore, the decrease being considerable in Gurdaspur, Amritsar and Siálkot. In Amritsar and Gurdaspur, besides plague, malarial fevers were very prevalent in the preceding autumn.

9. In all the districts of the Rawalpindi Division the birth-rates are about the average, except Shahpur, which shows a marked diminution, amounting to over 6 *per mille* compared with the average rate of the district and 7·6 with that of the previous year. Plague was most virulent in this district during the year and malarial fevers prevailed to an unusual extent in the previous autumn.

10. The birth-rates of Multan and Muzaffargarh have much decreased, particularly when contrasted with the previous year. This was fully anticipated. As stated in last year's report, Multan and Muzaffargarh are among the five districts in which the autumnal sickness of 1903 was more than usual on account of the greater monsoon rainfall.

11. It was remarked in paragraph 1 of the Review on the Sanitary Report for 1903 by the Punjab Government, that although a decrease in population caused by the severe prevalence of plague must have a marked effect in reducing the provincial birth-rate, there were striking exceptions in certain districts. And as a concrete instance it was pointed out that "while the increase of plague in Gujránwála was three times greater than in Gujrat, the fall in the birth-rate was twenty-three times greater in the latter district than in the former." Both the Deputy Commissioner and the Civil Surgeon of Gujránwála are unable to find out any local causes which would account for the comparatively smaller decrease in the birth-rate of the Gujránwála District. The Deputy Commissioner of Gujrat states that the comparatively greater decrease in the birth-rate of the district in 1903 was probably due to the exodus to the Jhelum Canal. It may, however, be noted here, that such fluctuations in the birth-rate have occurred in former years when there was no plague.

12. The births in the municipal towns were registered at the rate of 39 *per mille* during the year, or in the same proportion as in the previous year. This rate is 3 *per mille* less than that of the rural circles. The lower birth-rate in towns is partly due to registration being more defective than in rural circles.

13. In consequence of the increased virulence of plague during the year, the deaths exceeded the births by 7·6 *per mille*. Last year the excess amounted to 6·1 and in 1902 and 1901 it was 0·3 and 0·7. These figures would show as a rough estimate a deficit of 1·47 per cent. in the population of the Province since the last



census taken in 1901. The decrease has taken place in the plague infected districts, it being most marked in those that have suffered very severely from the pestilence. Estimated roughly in this way, the population of the district of Ludhiana since 1901 has decreased by no less than 13·4 per cent., Ambala 8·4, Jullundur 6·6, Gujranwála 5·3, Amritsar, Gurdáspur and Siálkot about 4·7 each, Shahpur, in which the disease was most fatal in 1904, by 3·3 per cent., and Hoshiárpur, Ferozepore, Lahore and Karnál, between 2·6 and 2·9 per cent. On the other hand, judging from the excess of births over deaths noticed in all the districts of the Multan Division and in the districts of Montgomery and Attock, that have hitherto entirely escaped or have suffered very little from plague, the increase in their population would vary between 4·1 and 6·3 per cent. As the decrease in the number of child-bearing women cannot be estimated, it is impossible to say in what proportion the birth-rates based on the diminished population would differ from those calculated on the census figures.

14. The total provincial birth-rate of 41·5 *per mille* during the year includes 21·7 of males and 19·8 of females. The proportion of male to female births. Annual Form No. I. between the male and female birth-rates is almost precisely the same as that observed in the mean ratio by sexes recorded during the previous five years. The number of males born to every 100 females born is 109·9 during the year or 0·4 less than in the year preceding. The proportion of female births is, as usual, much lower in the districts of Dera Ghazi Khan, Muzaffargarh, Mianwali, Attock and Shahpur, due probably to the omission of female births from the registers.

15. **Deaths.**—The total death-rate in 1904 amounted to 49·06 *per mille* as against 49·01 in 1903, the actual number of deaths, close upon one million in each year, being in almost equal proportion. A rate so excessively high for two years successively has never been recorded in this Province since the introduction of registration thirty-eight years ago. The deaths reported from plague alone in 1904 yielded a rate as high as 19·7 *per mille*, which is no less than two-fifths of the total death-rate of the year, and about double the rate of 10·2 recorded from that disease in the previous year. Excluding plague, the provincial death-rate amounts to 38·8 for 1903 and to only 29·4 for 1904, the difference of 9·4 being accounted for chiefly by a very satisfactory reduction of 6·5 in the mortality from fever in 1904, the rate under this head having fallen from 25·3 to 18·8. The death-rate from cholera decreased from 0·73 to 0·04, small-pox from 0·78 to 0·48, dysentery and diarrhoea from 0·82 to 0·6, respiratory diseases from 3·38 to 2·66 and “all other causes” from 7·42 to 6·43. Thus it will be seen that, were it not for the heavy mortality caused by plague, the year 1904 would have been a very healthy one.

16. Compared with other Provinces, the Punjab shows for the third year in succession the highest death-rate in India, the rates recorded in 1904 being in the following order:—Punjab 49·06, Bombay 41·39, United Provinces 34·7, Madras 32·5, Bengal 32·45, Central Provinces 32·06, North-West Frontier Province 28·56, Assam 25·85 and Burma 22·36.

17. As regards the proportion of mortality registered in different districts of the Province, a reference to Annual Form No. II will show that the district of Shahpur was very nearly decimated, its excessive death-rate of 97 *per mille* included about three-fourths from plague. Siálkot, Gurdaspur and Ludhiana recorded death-rates varying, in whole numbers, between 75 and 79 *per mille*, Ambala, Jullundur and Gujrat between 62 and 63, and Hoshiarpur, Amritsar and Gujranwála between 53 and 55. In all these districts the abnormal increase was due to plague. The details of the incidence of mortality from plague and other chief diseases are given in Section VI of this Report.

18. The death-rate was most excessive during the months of April and May when the epidemic of plague was at its maximum intensity. Of the total provincial rate of 49·1 *per mille* no less than 9·78 was registered in April and 8·09 in May, or at the rate of 36 per cent. in these two months. The death-rate of 5·35 in March, though much lower than in April and May, was still the highest registered in any of the



remaining months—March being the month in which the epidemic, on account of the commencement of mild weather, suddenly assumes a severe form. In July and August, when plague entirely subsided, the death-rates were as low as 1·86 and 1·85. Happily, excluding a very limited area, the Province enjoyed a complete immunity from an epidemic of malarial fevers as indicated by the small rates recorded in the autumn months. The increase in the death-rate of November and December is partly due to the recrudescence of plague. As an instance of the fearful increase in the mortality caused by plague, it may be noted that the death-rate of the district of Shahpur in April, when plague was most virulent, was *twenty-three times* higher than in August by which time the disease had entirely disappeared. The total number of deaths registered in April in that district was 17,889, of which no fewer than 17,012 were ascribed to plague, as against only 781 in August, including one death from plague. The death-rate of Shahpur for April was 415 *per mille per annum*. Excessively high as this rate is, it is not much greater than 391 recorded in the month of October 1890 in the district of Sialkot, when the epidemic of malarial fevers was at its height.

19. The health of the 145 municipal towns, as a whole, shows some improvement during the year, their death-rate of 46·74 *per mille* being 6·15 less than in the previous year. The death-rate from plague increased by 5·05, but, on the other hand, there was a large decrease of 6·81 noticed in the rate from fevers and 4·39 from other diseases. The mortality from plague increased at a much lesser rate in towns than in rural circles. The urban rate from this disease rose from 9·04 in 1903 to 14·09 in 1904, or 56 per cent., and in rural circles from 10·35 to 20·34, the rate being about twice as high as in the previous year. The death-rate of 49·31 in rural circles is 0·73 greater than in the preceding year. There was a total decrease of 9·25 in rural circles under different heads except plague; but, unfortunately, it was more than counterbalanced by the increased rate from that disease.

The fever death-rate of 16·46 *per mille* in the towns during the year is very moderate. It is about the average recorded in fairly healthy years. In as many as ninety-three towns the mortality from fevers was below this ratio. In only five small towns the death-rate was comparatively very high, varying between 30 to 40 *per mille*, but as plague was prevalent in them, it is highly probable that a certain number of deaths from this disease were wrongly reported as fever.

The abnormal increase in the total urban death-rate is accounted for by plague. The excessively high rate of 145 *per mille* in Hodal in the Gurgaon district and of 125 in Miani in the Shahpur district, both of which are very small towns with a population between seven to eight thousand, include very nearly 100 *per mille*, in each case, from plague. In twenty-four other minor towns having populations, in most cases, very much below ten thousand, and showing the high rates ranging from 60 to about 90 *per mille*, no less than 44 *per mille*, or 58 per cent. of their aggregate mortality rate of 76 *per mille*, was caused by plague.

20. With regard to the prevalence of plague in the four largest cities of the Province, the rate of mortality from that disease in Delhi is insignificant, being 1·29 *per mille* in 1904 and 0·04 in 1903. In Lahore and Amritsar, however, there was a marked increase during the year, the rates having risen to 9·37 and 6·85 from 2·66 and 1·82, respectively, in 1903; but they compare most favourably with the enormous rates indicating the great havoc committed by the pestilence in minor towns. In Multan, the fourth largest town, there were only a few fatal cases registered during the year, probably imported ones. Inquiries are being made as regards the relative immunity from plague of large towns, and a separate report will be submitted, as desired by the Government of India.

21. The most noticeable feature of the age return for 1904, as compared with that of 1903, is the great variation between the death-rates at different age periods notwithstanding that the total amount of provincial mortality in both the years is almost exactly in the same proportion. There is a large decrease in the death-rate of infants under one year and in the age period one to five, and, in striking contrast

Death-rates of Municipal towns and rural circles. Annual Forms Nos. VI A and B.

Death-rates in the four largest cities. Annual Form No. VI B.

Age returns. Annual Form No. IV.



to this, a considerable excess in the rates between the ages of ten to fifty, notably in the age periods ten to fifteen and fifteen to twenty. Such differences have not been noticed before the appearance of plague in the Province, when the total death-rates for any two years happened to be equal. For instance, in 1897 and 1898, when both the aggregate mortality of the Province and the death-rates from different diseases approximated most closely, there was hardly any variation between the death rates under any of the age periods for those years, excepting slight differences in the first two periods. And since it is plague that caused an increase in the mortality in 1904, and in almost equal proportion to the amount of decrease in other diseases as compared with the previous year, it may safely be concluded that the great excess noticed in the death-rates in the age periods from ten to fifty years and in a most marked degree in the case of young persons between ten to twenty in 1904 was due to that disease. It is worthy of note that, in spite of the enormous increase of plague mortality, the provincial death-rate of 226 among infants under one year of age per 1,000 births, compared with 265 in the previous year, shows a decrease of 39, which must be due to the diminished death-rate from fevers and other causes. The infantile mortality is very moderate and corresponds closely to the proportion observed in healthy years when there was no plague in the Province. For instance, it is almost equal to 223 recorded in 1898, the year in which both the birth-rate and the death-rate from different causes were nearly the same as in 1904 excluding plague from the latter year. Evidently, the infant population remains unaffected by plague. The rate among male infants per 1,000 of births was 224 and among females 229 during the year. There was a marked excess, as usual, in the female infant rates of the districts of Jullundur, Ludhiāna and Amritsar. The total male death-rate of the Province in 1904 was 44·47 and the female 54·37 *per mille*, including 16·52 and 23·41, respectively, from plague, showing an excess of 41 per cent. in the female rate from plague as against only 11 per cent. in the case of other diseases. The causes of the higher mortality from plague among females are being inquired into and will be reported upon separately. The matter regarding the classification of deaths from different diseases separately, according to age periods, is under consideration.

22. A comparison of the statistics of mortality registered among Hindus Death-rates by classes. Annual Form No. V. and Muhammadans in the Province during the last decennium shows that their death-rates varied slightly during 1895 to 1899 which were healthy years. The mean ratio for the quinquennial period, however, was about 3 per cent. greater among Hindus. In 1900, when famine and fever were very prevalent, the Hindu death-rate exceeded that of Muhammadans by 21 per cent. and in 1901 and 1902 by 17 and 12 per cent. In 1903 the Muhammadan rate increased by 1 per cent. and in 1904 by 8 per cent. as compared with the Hindu rate; the Muhammadan rate being much higher than that of Hindus in most of the plague infected districts. Taking the total figures for the districts in which the plague mortality during the year under review exceeded 25 *per mille*, the Muhammadan death-rate was 74 *per mille* compared with 63 among Hindus, showing an increase of 17 per cent.; the excess amounting to 71 and 46 per cent. in the districts of Shahpur and Ludhiana in which the highest death-rates from plague were recorded. The subject regarding the variation in the Hindu and Muhammadan death-rates is under consideration and a separate report will be submitted.

23. Special attention has been paid during the year to the registration of Results of inspection of Birth and Death Registers. births and deaths in the municipal towns in the Province. All the Divisional Inspectors and Superintendents of Vaccination were employed during the summer in testing the accuracy of the registers. Nearly all the municipal towns were visited by them, and a considerable number of entries of births and deaths were verified. The results of their inspection show that the number of omissions to total entries checked was 6·2 per cent. in the case of male and 6·3 in that of female births, and 3·3 and 2·9 in male and female deaths; the percentages of omissions detected by the Divisional Inspectors in rural circles were 3·8 of male and 4·1 of female births and 3·0 of male and 2·6 of female deaths. The percentage of omissions of births is much higher in towns than in rural circles, and a larger number of births than deaths are omitted from the registers of a great many towns.



Altogether a total of 357,573 entries of male births and 323,562 of female births and 370,410 of male deaths and 380,830 of female deaths were examined by Divisional Inspectors, Superintendents of Vaccination, Vaccinators and Revenue Officers; and the number of omissions found were 7,636 of male and 7,118 of female births and 5,308 of male and 4,935 of female deaths. The number of chaukidars fined for neglect to report births and deaths at the *thanas* was 153, and the fines amounted to Rs. 93. The attention of Deputy Commissioners was invited to paragraph 4 of the Review on the last year's Sanitary Report regarding the small average of fines inflicted in municipal towns for offences against municipal bye-laws, in the matter of registration. The number of persons fined during the year 1904 was much larger, being 214 against 149 in the previous year, and the amount of fines inflicted increased from Rs. 77 to Rs. 176, and it is expected to be much greater during the current year, as a number of prosecutions were still pending at the close of 1904.

24. The returns show a marked improvement in the health of the railway stations outside municipal limits, the total mortality registered during the year being only 119 as against 201 in the year preceding; the number of deaths reported from fever decreased from 108 to 58. There were 11 deaths registered under the head of plague. The number of births recorded during the year was 133, of which 67 were of males and 66 of females.

25. The births registered among Europeans and Eurasians numbered 170 and deaths 140. There were no deaths reported from cholera, small-pox and plague. There were 33 deaths from fevers, 9 from dysentery and diarrhoea, 20 from respiratory diseases, 2 from injuries and 76 from all other causes.

## Section VI.—Chief Diseases.

26. **Cholera.**—Happily cholera did not prevail in any severe epidemic form in the Province during the year, the total mortality amounted to only 716, yielding a death-rate of 0·04 *per mille* of population. There are about thirty-three thousand towns and villages in the Province, and of these there were only one hundred and seven in which deaths from cholera were reported. In ten districts not a single death was registered, in twelve others the total deaths did not exceed 70, and in the remaining six districts the affected area was extremely limited. Of the total cholera deaths in the Province, 228 or nearly one-third were recorded in the district of Hissar, and most of them were reported to have occurred in a single village in which the severity of the outbreak was attributed to the contamination of water-supply. The district of Hoshiarpur had 135 deaths, Jullundur 101, Rohtak 69, Karnal 67 and Kangra 46, and the number of villages affected by the disease was 73. In several instances the first few cases that occurred in a district were among persons returning from Hurdwar. All possible precautionary measures were taken to prevent the spread of the disease, and in most cases the wells of affected villages were disinfected with permanganate of potash. There were only 88 deaths registered in the municipal towns, of which 53 took place in Hoshiarpur and 12 in Lahore.

27. **Small-pox.**—The deaths attributed to small-pox numbered 9,624 during the year, showing a rate of 0·48 *per mille*, which is a little over the mean ratio of the previous five years, and 0·3 lower than that of 1903.

The highest mortality, as is very often the case, was registered in the month of May and the lowest in October. In a few districts, however, the epidemic declined after reaching its maximum in the month of January, notably in the case of Attock.

As regards seasonal prevalence, it is remarkable that, plague and small-pox follow a similar course. Plague like small-pox breaks out on the approach of the cold season, increases steadily in the winter, attains the maximum intensity by about the same time or some weeks earlier than small-pox, and declines with the commencement of the hot weather. In plague the decrease is most rapid, while in the case of small-pox it is gradual.

28. The mortality from small-pox was very much greater than the average of the previous five years in all the districts of the Delhi Division, excepting Simla and Delhi. The disease was very fatal in the district of Gurgaon, in which the deaths amounted to 1,757, or at the rate of 2·35 *per mille*. Vaccination is less popular in Gurgaon than in the central parts of the Province. In as many as eighteen districts, the death-rate was below the average, and in nine of them it did not exceed 0·1 *per mille*. The lowest death-rate during the year, as well as in the preceding five-year period, was recorded in the best vaccinated district of Kangra.

29. The death-rate registered from small-pox in the municipal towns was 0·91 *per mille* which is more than double the rate of 0·43 in the rural circles. The highest death-rates were recorded in some of the municipal towns of the districts of the Delhi Division, in which, as already stated, the epidemic was very severe, for instance 9·24 in Jhajjar, 6·65 in Bhiwani, 5·92 in Thanesar, 5·81 in Hansi, 5·77 in Firozpur, and 5·2 in Rewari. The introduction of the Vaccination Act in Rewari was under consideration during the year.

30. The rate of mortality in the twenty-three municipal towns in which the Vaccination Act is in force was 0·52 *per mille*, which compares very favourably with 1·3 registered in the rest of the towns in which vaccination is not compulsory. In the town of Rohtak, the death-rate of 3·69 *per mille* was exceptionally high and appears to show that the provisions of the Act are not strictly enforced.



31. **Plague.**—The following report on plague has been furnished by the Inspector-General of Civil Hospitals, Punjab:—

There were epidemics of plague in 26 of the 29 districts of the Punjab, only the districts of Kangra, Mianwali and Muzaffargarh escaping.

In the Kangra and Mianwali districts, moreover, imported cases of plague occurred, but these did not give rise to an epidemic. Of the districts in which epidemics occurred all but three were already infected at the beginning of the year—the remaining three districts were those of Delhi, Multan and Dera Ghazi Khan which became infected, respectively, in February, March and November 1904.

(2). Isolated cases of plague had occurred in these three districts in previous years, but they suffered from epidemic of plague for the first time during 1904.

In the Delhi district the first place to be affected was a village called Fathehpur Baloch, in the Ballabgarh tahsil, infection having been introduced from the neighbouring district of Gurgaon. The disease spread to a few other villages and the city of Delhi itself became infected in August 1904.

The town of Tolamba was the only place in which an epidemic of plague occurred in the Multan district; the mode of infection of the place was not traced. Here 101 cases of plague with 85 deaths were reported.

The outbreak in the Dera Ghazi Khan district occurred in the city of that name. Infection, it is said, was brought by a local book-seller who had contracted plague during a visit to Lahore. The outbreak was limited to the city up to the end of May, between which time and the date on which the disease was first discovered, November 24th, 1904, 75 cases of plague with 53 deaths occurred.

(3). Between January 1st and December 31st, 1904, 435,105 cases of plague and 364,740 deaths were reported in British districts, while the number of plague cases reported by Native States was 46,307 and of deaths 38,210, bringing the totals for the whole Province up to 481,412 cases and 402,950 deaths. The monthly details of these figures by districts are given in Statement No. I attached.

(4). The epidemic under report is the most severe that has been experienced in the Punjab. The number of plague cases was 140,145 and of deaths 192,253 in excess of those reported during the epidemic of 1903, hitherto the worst.

(5). The districts of Attock and Multan became free from the disease in June and July 1904, respectively, and since then no cases of plague have occurred in these districts.

None of the other infected districts were declared free of plague during the year.

(6). The Native States of Patiala, Kapurthala, Nabha, Kalsia, Malerkotla, Jhind, Faridkot and Dujana suffered from outbreaks of plague during 1904.

(7). Compared with the epidemic of previous year, the districts of Hissar, Rohtak, Gurgaon, Karnal, Ambala, Jullundur, Ludhiana, Ferozepore, Sialkot, Montgomery, Gurdaspur, Gujrat, Shahpur, Jhelum and Jhang-cum-Lyallpur and Patiala, Kapurthala, Kalsia, Malerkotla and Jhind States suffered more severely.

The most marked increase occurred in the Ludhiana, Gurdaspur, Gujrat and Shahpur districts, where the excess over the figures of the previous year amounted to over 20,000 cases in each instance.

The Foshiarpur district experienced an epidemic about equal in severity to that of the previous year.

The Gujranwala, Lahore, Amritsar and Rawalpindi-cum-Attock districts and the Nabha, Faridkot and Dujana States suffered less severely than in 1903.

The decrease was most marked in the case of Gujranwala and Lahore districts, in which it was over 20,000 cases.



(8). Altogether 109 municipal towns were infected with plague during 1904 in the British districts. The names of those the population of which is 50,000 or over are given below, with the number of cases and deaths that occurred in each :—

							<i>Cases.</i>	<i>Deaths.</i>
1.	Delhi	...	...	...	...	...	250	282
2.	Jullundur	...	...	...	...	...	2,776	1,935
3.	Lahore	...	...	...	...	...	1,838	1,751
4.	Amritsar	...	...	...	...	...	1,292	1,103
5.	Multan	...	...	...	...	...	23	13
6.	Patiala (in Patiala State)	...	...	...	...	...	1,072	1,061

(9). Statement No. I referred to in paragraph 3 shows month by month the seizures and deaths in every infected British district in the Province.

On reference to this statement it will be seen that there was a gradual rise during the first four months, the number of cases rising from 15,121 in January to 160,684 in April, when the epidemic began to decline and the number of cases fell from 117,853 in May to 199 in August. From the beginning of September the epidemic again began to rise and the number of attacks, 626 in September, rose to 16,716 in December.

(10). As shown in Statement No II, 49,107 inoculation operations were performed in the British districts during the year under report. In addition, the number of operations reported by the Native States was 6,277, bringing the grand total for the Province to 55,384. The monthly details of these figures by districts are given in this statement. No special measures were taken for inducing the people to submit to inoculation, and the operation was performed almost solely in response to the spontaneous demands of the people.

(11). On reference to Statement No I, at the foot of which the percentages of mortality among the uninoculated and inoculated have been compared it will be seen that in the case of inoculated persons the percentage of deaths was 70·63, while among uninoculated the percentage was as high as 83·90.

It should, however, be borne in mind that the term "inoculated" used in this sentence includes not only the persons inoculated during the year under report, but also those inoculated during the previous years.

The statistics of plague cases and deaths, both among inoculated and uninoculated persons, are based upon the weekly reports made by chaukidars, which are far from being correct, especially as regards the occurrence of plague among inoculated persons.

The unsatisfactory nature of the statistics regarding plague occurrences among inoculated persons has already been brought to the notice of the Government in my letter No 3534, dated 31st October 1904.

(12). The Statement No. III gives by districts the details of the disinfection work done in British districts, 49,333 rooms were desiccated and 28,889 chemically disinfected.

Desiccation was in the great majority of instances carried out by means of the Jullundur pattern stove. Sometimes, however, other patterns of stoves were used, and occasionally desiccation was carried out by means of numerous small fires upon the floors.

The chemical disinfection of houses was carried out in accordance with the rules on the subject, a 1 in 800 solution of perchloride of mercury having been used. Clothes were disinfected by a 1 in 100 solution of a disinfectant resembling phenyle, but found to be cheaper and more efficacious than it.

While chemical disinfection was largely confined to towns, desiccation was chiefly resorted to in villages.

(13). Statement No IV shows the total amount expended in connection with plague measures during the year.

The total expenditure under different heads, as detailed in the statement, amounted to Rs 3,46,359·9-5.



(14). In general, the attitude of the people was not in favour of the plague measures adopted by Government. Even in the Jullundur and Hoshiarpur districts, where the advantages of these measures are well known, the people when advised by officers to adopt them, commonly replied that they were tired of plague measures, that it was no use fighting against fate (*qismat*) and that nothing but the will of God could remove the disease from amongst them. Complete evacuation of infected villages was observed only in a very few instances, but some infected towns, such as Beri in the Rohtak district, Maghiana in the Jhang district and Sargodha in the Jhelum Colony, were almost completely deserted for some time.

Partial evacuation of infected villages was resorted to much more freely in some districts than in others. In the Ludhiana, Ambala, Jullundur and Hoshiarpur districts, for instance, it was common to find a considerable portion of the inhabitants of infected villages in camp, while in other districts, as in Shahpur, little or no attempts were made at evacuation.

The isolation of the sick and the segregation of contacts were but rarely resorted to, and were almost entirely limited to the poorest classes living in towns. European treatment was but rarely asked for both in towns and villages.

The power given in paragraph XXXV (B) of Punjab Government Resolution No 1936 L.P., dated 16th November 1903, to the people of uninfected villages to refuse access to persons coming from infected places was exercised only in a few instances.

Surveillance over arrivals was exercised at a very few places, Kunjah town in the Gujrat district and all Hill Sanitaria in the Punjab being exceptions.

(15). In a very large proportion of infected towns and villages rats are stated to have been found dying or dead before human infection.

In addition to rats, squirrels, dogs, cats and monkeys are stated to have suffered from plague during its prevalence in many districts.

(16). The infection is generally stated to have been conveyed by human agency or clothing, and from house to house by these agencies also, as well as by means of rats.

(17). Sanitary surroundings also play an important part in the spread or otherwise of the disease. Most District Plague Medical Officers stated that the disease raged with greatest virulence in filthy villages and amongst filthy people.

High and dry parts of infected districts in most instances were less affected by the disease.

The prevailing type of the disease was bubonic, although pneumonic and septicæmic cases of plague were also observed.

(18). Most District Plague Medical Officers complain of the defective records of plague occurrences, especially non-fatal cases. That the reporting of cases was very imperfect may be inferred from the high percentage of case mortality, which has risen from 60.54 to 83.83 per cent. during the year under report.

Moreover, the percentage of case mortality has never exceeded 70 during any of the previous epidemics.

This subject has also been referred to when dealing with inoculation.

There is a difference in the case of certain districts in the number of plague deaths reported to this office and to that of the Sanitary Commissioner, Punjab, for the year under report. District Plague Medical Officers of the districts concerned explained that the cause of the difference is that for some time in the beginning of the year there were two different agencies for reporting plague statistics, that is, the record of deaths reported to the Inspector-General of Civil Hospitals, Punjab, was sent through the District Plague Medical Officers' office which got the figures from the Patwaris, while the reports to the Sanitary Commissioner were through the office of the Civil Surgeon which received the information from the chaukidars through



the police thanas. It is hoped that there will be no difference in the figures reported in future, as the informations will be received through one and the same agency (chaukidars).

**32. Fevers.**—There was a marked reduction in the mortality registered under the head of fevers. The total deaths correspond to a rate of 18·82 *per mille*. It is about the usual rate recorded in the Province in the healthy years 1895 to 1899. A rate so low as this has not been registered in any of the past four years. It is 6·51 less compared with the previous year, 5·95 below that of the average of the preceding quinquennial period and 13·49 lower than that of 1900 in which the fever epidemic was most severe. A heavy monsoon rainfall in the Province is always followed by severe epidemic of malarial fevers. Fortunately the rainfall in 1904 was below the normal, and this accounts for the moderate death-rate recorded from fevers. The fever mortality was below the average in all the districts of the Province, excepting a few in which it was very nearly equal. The decrease was most noticeable in Hissar, Ferozepore, Ludhiana, Rohtak, Karnal, Lahore, Ambala and Gujranwala. In most of these districts the monsoon rainfall was very scanty.

**33.** The trial measures regarding the destruction of mosquitoes were carried on, as usual, in the selected towns of Gujranwala and Gujrat, but the prevalence of plague again interfered with the operations.

Trial measures for the destruction of mosquitoes and filling up of pools around towns.

Major J. R. Addie, I. M. S., Civil Surgeon of Ferozepore, made further investigations into the prevalence of anopheles in his district, and their relation to malaria, and submitted a special report on the subject.

As regards the grants sanctioned by Government for the filling up of depressions in certain towns mentioned in last year's report, the municipality of Palwal has postponed the project as it could not provide its own share of the expenditure. In Mukerian the work is progressing, and in Hansi and Ladwa the matter is under consideration.

**34. Dysentery and Diarrhœa.**—The total number of deaths attributed to dysentery and diarrhœa during the year were 12,115 equal to a rate of 0·6 *per mille*. This rate is 0·22 below that of the preceding year and 0·23 less than the average of the quinquennial period ending 1903. It is the usual experience in this Province that when there is a decline in the fever death-rate, there is likewise a falling-off in the mortality from dysentery and diarrhœa. And this was the case during the year under review, the mortality from dysentery and diarrhœa showed a diminution in all those districts in which a decrease was noticed in the fever death-rate. The mortality rate of towns, taken as a whole, was 1·81 *per mille*, compared with 0·47 *per mille* in the rural circles. The urban death-rate in the previous year was 2·38 and the rural rate 0·65. The mortality reported from dysentery and diarrhœa is usually much higher in towns.

**35. Respiratory Diseases.**—The deaths registered from respiratory diseases amounted to 53,520, giving a rate of 2·66 *per mille* which is 0·72 less than that of the preceding year. There is, as usual, a great variation in the rates recorded in different districts, that is, from 0·38 in Multan to 10·2 in Gurdaspur. The death-rate in towns was 5·55 as against only 2·34 in the rural circles. In as many as thirty-one towns, the mortality rate from respiratory diseases was very high, ranging from 7·14 to 20·81. As plague was prevalent in all those towns it is probable that a large number of deaths occurring from the pneumonic type of the disease were registered as respiratory diseases.

**36. Injuries.**—There was a total of 6,472 deaths recorded under the head of injuries, corresponding to a rate of 0·32 *per mille*, which is almost the same as the average rate of 0·33 registered during the previous five years. Of the total mortality from injuries, 328 deaths (149 males and 179 females) were due to suicide, 4,874 to wounding and accidents and 1,078 to snake-bite. There were 75 persons killed by wild beasts and 117 were reported to have died from hydrophobia.

37. It appears from the report of the Pasteur Institute of India for the year ending 8th August 1904, that there were 248 European and 364 Indian patients treated during the year, and that there were only five cases in which the treatment failed to confer protection.

Lt.-Col. D. Semple, R.A.M.C., Director, Pasteur Institute, Kasauli, states that "these five persons (all natives) contracted hydrophobia more than fourteen days after the completion of treatment. All were deeply and severely bitten and the bites were numerous and inflicted on the bare person, and with one exception they arrived late for treatment."

38. **All other causes.**—The death-rate registered under the head of "all other causes" amounts to 6·43 *per mille*, showing a decrease of 0·99 as compared with 1903. The highest death-rate was 10·3 registered in the Gurgaon district and the lowest 0·8 in the Gurdaspur District. In the latter district an extraordinarily high rate of 10·2 was recorded from respiratory diseases. Evidently a large number of deaths occurring from other diseases were wrongly reported by village chaukidars as due to respiratory diseases.

Annual Form No. II.



## Section IX.— Sanitary Works.

39. The Annual Report of the Sanitary Engineer to the Government, Punjab, on Sanitary Works for the year 1904 is given as Appendix B to my Report as directed by Government.

Sanitary works.

40. The income derived from the sale of manure of all municipal towns in the Province during the year amounted to Rs. 1,57,718 against Rs. 1,63,344 in the previous year. The following towns fetched the largest sums of money, viz., Amritsar, Sialkot, Lahore, Delhi and Gujranwala.

Sale of manure.

41. The number of wells cleared and the number of parapets constructed during the year were 6,906 and 1,430, respectively, at a cost of Rs. 20,046. Satisfactory progress was made in the following districts:—Lahore, Hoshiarpur, Gujranwala, Jullundur, Multan, Amritsar, Ambala, Gujrat, Karnal and Dera Ghazi Khan.

Clearance and repairing of wells and construction of parapets.

42. With regard to the grant of rewards and *khillats* to village communities, the Deputy Commissioner of Rohtak states that no rewards for sanitary improvements were granted during the year, but the matter will be brought to the notice of the District Board with a view to rewards being offered as an experiment during the ensuing year. No action has been taken by the District Board, Delhi, with regard to the proposal to grant a sum of Rs. 500 to the most deserving villages: but the Deputy Commissioner states "that efforts have been made during the year for the promotion of sanitation in villages by means of disinfecting houses as a preventive against plague." The Deputy Commissioner of Karnal states that nothing was done during the year towards the promotion of sanitary improvements, as whatever funds there were at the disposal of the District Board were wanted on other more urgent works. The matter is, however, being laid before the District Board with a view to effect being given to the proposals during the current year. In the District of Gurdaspur the attention of the rural community was drawn through the District Board's Resolution regarding grants of rewards for sanitary improvements, but no claim has been put forward or recommendation made for the grant of a reward.

Rewards and khillats for improved village sanitation.

43. In the district of Hissar there were 403 villages supplied with village sanitary note-books during the year. The Deputy Commissioner of Rohtak states that thirteen villages were supplied with sanitary note-books. They were, as usual, examined by the Civil Surgeon, who recorded his remarks on the sanitary condition of the villages. In the Gurgaon district 44 selected villages were provided with sanitary note-books. In the Karnal district sanitary note-books were maintained in 28 villages. The Deputy Commissioner of Hoshiarpur states that the number of villages supplied with sanitary note-books remained the same as in 1903.

Village sanitary note-books.

44. The following works of public utility were constructed by private individuals, at their own expense, to serve sanitary purposes during the year 1903-1904:—

Works of public utility.

A *chaupal* (rest-house) at Kabulpore Bangas in the Delhi District was built by Sardar Mohar Singh, son of Sheodan Singh, and Sardars Khushal Singh and Sarup Singh of Kabulpore Bangas at a cost of Rs. 3,000. In the Rohtak district a *pucca* (masonry) well was sunk and a *dharmsala* constructed on the Rohtak-Jhajjar Road by Lala Kirpa Ram, son of Bakhshi Rai, Mahajan of Beri, at a cost of Rs. 12,570. In the district of Gurgaon one *pucca* well was sunk and a public rest-house constructed with a large garden as also a *dharmsala* by Rao Chajju Ram, zaildar of Dharuhera, Tahsil Rewari, at a total cost of Rs. 10,000. These works were constructed to commemorate King-Emperor's Coronation. One *pucca* well was sunk near the village, Sekundarpur, by Lala Tat Ram, contractor of Gurgaon, at a cost of Rs. 2,000.

Delhi Division.



In the district of Kangra, a *serai* (rest-house) was constructed at Paragpur, Tahsil Dehra, for travellers by Lala Buta Mul, son of Lala Ram Das, Sud, of Paragpur, Tahsil Dehra, at a cost of Rs. 4,000. In the district of Jullundur a *serai* with well near the Railway Station, Jullundur City, was constructed by Lala Nand Lal, son of Lala Bilas Rai of the Jullundur City, at a cost of Rs. 55,000. In the district of Ferozepore a *pucca serai* at Singhanwala was constructed by Sardar Sundar Singh, son of Sardar Dewa Singh, of Arora village, in the Moga Tahsil, at a cost of Rs. 7,500. One *pucca serai* at Fazilka was constructed by the trustees of the late Bawa Maya Nath, *Hakim*, at a cost of Rs. 9,000.

In the district of Dera Ghazi Khan a *serai*, well and mosque for public use on the Trunk Road near the town of Jampur were constructed by Haji Muhammad Rahim Khan, pensioner, kardar of the Bahawalpur State, at a cost of Rs. 2,000.

## Section X.—General Remarks and Personal Proceedings.

45. The office of Sanitary Commissioner, Punjab, was held by me throughout the year. Captain W. F. Harvey, I.M.S., held the office of Deputy Sanitary Commissioner, Punjab, from the 1st January to the 11th April 1904, and again from 2nd October to the 31st December 1904, and during the remaining period Captain W. H. C. Forster, I.M.S., acted as Deputy Sanitary Commissioner, as Captain Harvey was appointed Assistant Director of the Pasteur Institute of India at Kasauli from 12th April to the 30th June 1904, and from 8th July to 1st October 1904 he was on privilege leave.

During the first three months Captain Harvey was busy in conducting experiments on vaccine lymph and in the last quarter he was occupied in inspecting vaccination work of the special staff. Captain Forster spent the whole period of six months in inspecting vaccination work done by the staff and superintending the work of the Dépôt.

46. In January 1904 I inspected the towns of Mianwali, Kalabagh and Isa Khel and twenty villages. In February I proceeded to the Shahpur district to inspect the towns of Bhera and Khushab and saw the vaccination of six villages, I then visited the towns of Dera Ghazi Khan, Multan, Toba Tek Singh, Lyallpur, Chiniot, Kaithal, Karnal and five villages. In March I inspected the town of Panipat and then went to Thanesar to superintend the sanitary arrangements for the Eclipse Fair held there. I then visited the towns of Ladwa, Ambala, Delhi, Rewari, Bhiwani, Hansi and Hissar, and one village. In April I inspected the towns of Jhelum, Pathankot, Dalhousie and eleven villages. In May I visited the towns of Kalka, Kasauli, Rawalpindi, Murree and the Lawrence Memorial Asylum there. In June I went up to Simla and inspected the Sewage Disposal Works at Lalpani and Kusumpti, whence I proceeded to inspect vaccination in the Hill States of Theog, Kumarsain and Rampur Bashahr. In July I returned from the Bashahr State to Simla and inspected the water-supply springs on the cart road from Simla to Kalka and went on to Delhi. In August I visited the towns of Rewari, Hissar, Ludhiana and returned to Simla. During the months of July, August and September I investigated the causes of an outbreak of enteric fever in Simla and embodied the result of my inquiries in a report to Government. In September I inspected the Lawrence Military Asylum at Sanawar. In October I came down from Simla, inspecting the sanitation on the road to Kalka *via* Kasauli and visited the towns of Kharor, Rupar and eight villages. In November I went to Delhi and in December I inspected the towns of Toba Tek Singh and Jhang-cum-Maghiana.

47. The usual number of lectures was given by me to the students of the Medical College, Lahore, in my capacity of Professor of Hygiene.

48. The following towns were inspected by Captain W. F. Harvey, I.M.S.:—Kasauli, Kalka, Dera Ghazi Khan, Ludhiana, Thanesar, Jagadhri, Delhi, Amritsar, Fattahabad in the Hissar district, Maghiana, Jhang, Rohtak, Tarn Taran and Jhelum. Captain W. H. C. Forster, I.M.S., inspected the towns of Rawalpindi, Murree and Simla.

49. During the year 181 towns and 1,352 villages were inspected by the Civil Surgeons as compared with 204 towns and 1,248 villages during the year 1903. The Assistant Surgeons inspected 28 towns and 45 villages as compared with 8 towns and 59 villages in the previous year. The largest number was inspected by the Civil Surgeons of Gujranwala, Gujrat, Mianwali, Hoshiarpur, Jhelum and Rohtak.



50. During the year under report quinine was freely distributed in the districts of Rohtak, Gurgaon, Hoshiarpur, Ferozepore, Gurdaspur, Sialkot, Gujranwala, Gujrat, Jhelum, Rawalpindi, Mianwali and in Muzaffargarh.

51. As directed by the Government of India, *vide* their letter No. 57, dated the 8th January 1900, that a brief history of the sanitary arrangements of all new towns formed within railway precincts be given, the Manager of the North-Western Railway reports that no new towns were formed during the year under report, except that a *mandi* (market) has been built by the Nabha State near Gobindgarh Station, which lies between Sirhind and Khanna, about a quarter of a mile from the railway lines.

52. The municipalities that dispose of sullage to cultivators are as follows:—Lahore, Amritsar, Delhi, Gujranwala, Lyallpur, Ludhiana and Ferozepore, and the prices charged vary. The amount of land under sewage irrigation in Lahore during the year was  $309\frac{1}{4}$  acres or  $107\frac{1}{4}$  more than last year, and the amount paid for this was Rs. 3,803-9-0; in Amritsar 119.42 acres were under irrigation, and the amount realized for its use was about Rs. 1,451; in Delhi 39 acres and the amount realized was Rs. 624; in Gujranwala 22 acres yielding Rs. 253; in Lyallpur 34 acres, the amount paid for its use was Rs. 204; in Ludhiana 36 acres and the amount realized was Rs. 203; and in Ferozepore 8 acres of land were under sewage irrigation and the amount paid for its use was Rs. 195. A fuller account of the land treatment of sewage is to be found in a Report by Mr. Goument and myself on Sewage Disposal in the Punjab.

53. A brief account of the work done by the Sanitary Board during the year is given, as usual, in Appendix A to this Report.

LAHORE :  
The 15th May 1905. }

C. J. BAMBER, LT.-COLONEL, I. M. S.,  
Sanitary Commissioner, Punjab.





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## APPENDICES.

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## APPENDIX A.

## PROCEEDINGS OF THE SANITARY BOARD.

Four meetings of the Sanitary Board were held during the year 1904, and a brief account of the work done by the Board is given below :—

1. *Sargodha Water Works Scheme*.—This project was approved by the Board and the plans and estimates were forwarded to the Local Government for sanction.

2. The scheme for improving the drainage of the *Khazana and Gilwali Gates sections of Amritsar City* was approved and the scheme, with connected papers, was submitted to the Local Government for sanction.

3. *Jhelum Drainage Scheme*.—This scheme was approved by the Sanitary Board and submitted to Government for sanction.

4. *Ambala Intramural Drainage Scheme*.—The scheme was approved by the Board and submitted to the Local Government for sanction.

5. *Drainage Scheme of Muktsar*.—The project was approved and forwarded to Government for sanction.

6. *Drainage Scheme of Majitha*.—The Board after due consideration resolved that the drainage scheme should be a first charge on the funds of the Municipality and that the building of a Town Hall should by all means be postponed till after the completion of the drainage scheme. The Board further resolved that as the Municipality was a poor one, Government should be asked to remit the Public Works Department charges and also to give a grant-in-aid sufficient to enable the Municipality to complete the work.

7. *Chiniot Drainage Scheme*.—The scheme was considered by the Board, and as there was a question of the outfall being blocked owing to the flood-spills of the Chenab being held up by irrigation, the Board were of opinion that the project should await the Sanitary Engineer's inspection in the winter.

8. *Suburban Drainage Scheme of Delhi*.—It was resolved that the Commissioner and Superintendent of the Delhi Division be informed that the Board were of opinion that the suburban drainage was of very great importance and that the Municipality be asked to consider the question of taking in hand the project at an early date and not leaving it for three years.

9. *Latrines at Dalhousie*.—A grant-in-aid of Rs. 350, asked by the Municipality for the construction of latrines, was disallowed.

10. *Rewards for village sanitation to the Chenab Colony villages*.—The Board were of opinion that Annual Report should be submitted to them describing the manner in which money has been spent, especially with reference to sanitary improvements.

11. *Safety Water Elevator*.—It was decided by the Board to give a grant of Rs. 350 to a Municipality in the province, such as Lahore, for the purchase and trial of a Safety Water Elevator, and they were asked to report the result of the experiment for the information of the Sanitary Board, the amount being met from the grant sanctioned annually by the Punjab Government for conducting experiments likely to be of use in furthering sanitation.

12. *Grant-in-aid for experimental works*.—The sum of Rs. 80, as allowance to the Municipal Superintendent, Ambala City Works, Handesra, from April to July 1904, was approved by the Board.



## APPENDIX B.

ANNUAL REPORT OF THE SANITARY ENGINEER TO GOVERNMENT,  
PUNJAB, FOR THE YEAR 1904.

THE post of Sanitary Engineer to Government was held by me from 1st January to 27th July and from 24th October to the end of the year. During my absence on privilege leave between these dates, the work of my office was carried on in the Punjab Public Works Department Secretariat.

2. *Amritsar*.—The Amritsar Water Works, estimated cost Rs. 10,49,935, were completed in November and opened by Sir Charles Rivaz, the Lieutenant-Governor of the Punjab. The Special Works Division, in which this work was carried out under my direct supervision, was abolished on the 15th December.

An estimate, amounting to Rs. 16,915, for clearance of storm channels round Amritsar City, was sanctioned during the year. This work was carried out in the Amritsar Special Works Division. Eight estimates were prepared for remodelling the street drains in the several wards of the city. Two of these were sanctioned and work was commenced in one of the wards. A preliminary estimate, amounting to Rs. 87,800, was prepared for disposal works at the city outfall. The works proposed consisted chiefly of a pumping station and a sewage farm. The Municipality has not come to any definite decision yet as to whether it will take up the work proposed or not.

3. *Simla*.—The Simla Water Works were inspected in November. The Municipal Committee made good progress during the year under review in adopting measures for preventing the excessive use of water and checking loss by waste. Deacon's waste water meters were read periodically and the losses indicated by the meter diagrams were investigated and stopped. Fifty-five old house connections were metered during the year and thirty-two new house connections were made and metered. The consumption of water in 1904 was roughly 10 per cent. less than in 1903 and this, despite the fact that last year the supply was constant throughout the year and roads were freely watered, while, in 1903, the supply was intermittent and roads were not watered for several weeks in the hot weather.

Two small subsidiary pumping installations were erected below the present Lower Gravitation line at a cost of Rs. 22,000. These will give an additional supply of 70,000 gallons a day in the hot months, if required.

An estimate for a hydro-electric installation to increase the water-supply of Simla and light the station with electricity was prepared and submitted to the Local Government. This project was referred by Government for consideration to a committee of experts, composed of the Chief Engineer, Punjab, Electrical Engineer to the Bengal Government, Under Secretary to the Government of India, Public Works Department, General Branch, and the Sanitary Engineer to Government. This committee reported favourably on the proposal and recommended its acceptance subject to a few modifications of details. The committee's recommendations have been forwarded to the Government of India for sanction.

The sewage extension works, estimated cost Rs. 5,18,622, were practically completed during the year, and all the systems of new sewers were brought into use. The Lalpani disposal works were not quite finished at the end of the year, but they were well advanced. All the Septic Tanks in use at the outfalls worked well and gave satisfactory results. The experimental filters at Lalpani and Kasumpti also continued to do well. The filters were worked with 200 gallons of septic tank effluent per square yard up to November, when the rate was increased to 250 gallons.

The Sanitary works of Simla were examined in October by the Sanitary Commissioner in connection with an outbreak of enteric fever in the station, and it is satisfactory to note that after a careful inspection of the sewerage system and bacteriological analysis of water from the municipal mains he recorded his opinion that the outbreak could not be ascribed to any defect in the water or drainage works of the station.



4. *Lahore*.—Owing to changes of Municipal Engineers, very little progress was made by the Lahore Municipality in carrying out the several sanitary schemes which it has in hand. With a view to push these works through without further delay a second Public Works Department Division has been formed at Lahore and these works have now been made over to this Division.

The remodelling of the city intercepting drain was carried out (estimated cost Rs. 12,526). The work was not quite finished, but very little remained to be done at the end of the year.

An estimate, amounting to Rs. 90,393, for draining and improving the Lahore Mall was prepared and submitted to the Local Government. The work has been put in hand.

5. *Delhi*.—The intramural drainage works, estimated to cost Rs. 1,46,030, were put in hand. The work is being carried out by the Public Works Department.

An estimate, amounting to Rs. 3,79,345, for the drainage of the Delhi suburbs was submitted to the Sanitary Board and passed on, after approval by the Board, to the Local Government for sanction.

The Delhi Water Works were inspected and a note forwarded to the Municipal Committee of the points which needed attention.

6. *Ambala*.—The Headworks of the Ambala City water-supply were extended by the addition of five new wells, 10 feet diameter and 55 feet deep, pitched 110 feet apart. One of the old wells was sunk 18 feet further into a stratum of very coarse sand as an experimental measure. This resulted in such an improvement of yield that a proposal was submitted for the further sinking of four more wells of the original series. This was sanctioned and the work was put in hand.

An estimate for the intramural drainage of the city, amounting to Rs. 39,297, was sanctioned and work was commenced.

7. *Nurpur in the Kangra District*.—A preliminary estimate, amounting to Rs. 20,000, was prepared for supplying the town of Nurpur with water by lifting it 600 feet from the Jabar stream by means of turbines worked by a fall in the same stream.

8. The following sanitary works under construction, which have not been alluded to above, were inspected from time to time :—

- (1). Gojra water-supply and drainage ;
- (2). Toba Tek Singh water-supply and drainage ;
- (3). Dharmsala water-works ;
- (4). Chunian drainage ;

and the following completed works were reported on :—

- (1). Lyallpur water-works ;
- (2). Lyallpur drainage works ;
- (3). Chiniot Road drainage works ;
- (4). Mianwali water-works ;
- (5). Ambala City extramural drainage and disposal works.

9. I was consulted regarding the following works, and I gave such professional advice as was needed after inspecting the localities :—

- (1). Sialkot water-supply.
- (2). Pind Dadan Khan water-supply.
- (3). Pind Dadan Khan drainage.
- (4). Drainage of Hansi.
- (5). Drainage of Hazro.
- (6). Drainage of Jhang, Maghiana.
- (7). Drainage of Mayo Hospital, Lahore.
- (8). Dajal water-supply.



10. A list of projects prepared under my supervision or in consultation with me is given in Statement A attached.

11. Statement B shows the quantity of water pumped and used during the year at several water-works stations in the Province and the cost of pumping.

12. With the view to arrange for an interchange of reports between investigators in England and India on the experiments being carried out in both countries on the biological treatment of sewage, the Government of India called for full particulars showing what was actually being done in the matter of sewage disposal in the Punjab, how the operations were received by the people affected, and the result of the experiments already carried out in the Province. In compliance with this request, a joint report on the subject was submitted by the Sanitary Commissioner and myself.

13. In my report of last year I referred to the steps which were being taken by the several municipalities for whom drainage works have recently been constructed to dispose of sewage at their outfalls by land irrigation. Although some progress has been made, I regret being unable to record any appreciable advance during the year in this matter of sewage disposal. Municipal Committees will not for some reason take the interest in this matter that it really requires if success is to be achieved. Generally speaking, the management of sewage farms and the disposal of sewage at outfalls cannot be said to be satisfactory in most of the municipal towns of the Province. I have drawn attention to this frequently in my inspection notes and warnings have been issued to the local bodies concerned in some cases by the Local Government, but so far little or no improvement has been effected.

C. E. V. GOUMENT,  
*Sanitary Engineer to Government, Punjab.*

# STATEMENT A.

LIST OF PROJECTS FOR SANITARY WORKS PREPARED IN 1904 UNDER THE SUPERVISION OF THE SANITARY ENGINEER TO GOVERNMENT, PUNJAB.

No.	Projects approved by the Local Government or Sanitary Board.	Estimated cost.	No.	Projects prepared or under preparation but not yet sanctioned.	Estimated cost.
		Rs.			Rs.
1	Ambala City Intramural Drainage	...	1	Hydro Electric Scheme for increasing the Water-supply of Simla and lighting the station with Electricity.	39,297
2	Mukhtsar Drainage Scheme	...	2	Sargoda Civil Station Drainage Scheme	10,836
3	Revised estimate Simla Sewerage	...	3	Improvements to the Water-supply of the Female Lunatic Asylum at Lahore.	5,18,622
4	Amritsar City Intramural Drainage Bhagtan Gato area	...	4	Water-supply for the Jubilee Hospital, Amritsar	15,518
5	Ditto ditto Gilwáli ditto	...	5	Hazro Drainage	17,344
6	Revised estimate for Sargoda Water-supply	...	6	Multan Jail Water-supply	1,22,266
7	Ditto ditto City Drainage	...	7	Additional street drains, Lyallpur City	71,522
8	Majitha Drainage Scheme	...	8	Providing water connections for the Colonization Officer's residence at Lyallpur.	7,021
9	Water-supply of Lyallpur Jail	...	9	Sewerage and Sullage drains for Barnes Courts Estate at Simla, converting its latrines into water trough closet and constructing Pail Depôts.	9,018
10	Sewerage and Sullage Connections of the European Clerks' Cottages, Simla.	...	10	Further sinking of four old wells, Ambala City Water-Works	9,955
11	Fire protection of certain Imperial Buildings at Simla	...	11	Bhera Drainage	15,108
12	Internal sanitary fittings of the new Imperial Civil Secretariat at Simla.	...	12	Jagraon Drainage Scheme	10,403
			13	Proposed cheap storage Reservoirs for storm water at Simla	...



**STATEMENT B.**  
**STATEMENT OF WATER PUMPED AND USED IN THE FOUR WATER-WORKS STATIONS OF SIMLA, DELHI AND LAHORE AND AMBALA, AND OF COST OF PUMPING.**

Name of station.	Population served (according to the census of 1901).	WATER USED.		Daily consumption per head in gallons.	WATER PUMPED.		FUEL USED.		Cost.				Lift, including friction head.	Cost per 100,000 gallons lifted 100 feet.	REMARKS.	
		During the year.	Daily average.		During the year.	In the three hot months, April to June.	Description.	Quantity,	Value of fuel used.	Value of stores.	Establishment.	Total.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Simla	...	...	...	...	40,469,549	20,570,764	Wood and coal...	1,665	14	13,842	1,287	5,824	20,953	1,300	3.9	* The population entered in column 2 is the summer population according to the Simla Census Report of 1904. The winter population, according to the Imperial Census of 1901, was 13,960.
Delhi	...	141,189	481,878,385	1,320,215	9.35	481,878,385	149,331,572	834	16	15,017	1,392	4,637	21,046	155	2.8	
Lahore	...	146,029	714,948,111	1,958,761	13.41	714,948,111	178,737,027	957	8	18,592	800	5,034	24,426	100	3.4	
Ambala	...	28,200	48,763,024	1,33,597	4.74	48,775,668	11,120,473	652	3	3,376	272	3,672	7,320	272	5.6	This high rate is due to the engines having worked irregularly owing to shortness of supply.

## APPENDIX C.

*Statement showing the death-rates from Cholera, Small-pox. Fevers, Dysentery and Diarrhœa for the five years preceding, and for the period since the introduction of drainage or water-supply, or both, in the undermentioned towns.*

TOWNS.	DATE OF COMPLETION OF WORKS OF		AVERAGE ANNUAL DEATH-RATE SINCE THE INTRODUCTION OF DRAINAGE OR WATER SUPPLY, OR BOTH.				AVERAGE ANNUAL DEATH-RATE FOR THE FIVE-YEAR PERIODS PRECEDING THE INTRODUCTION OF DRAINAGE OR WATER-SUPPLY, OR BOTH.			
	Drainage.	Water-supply.	Cholera.	Small-pox.	Fevers.	Dysentery and diarrhœa.	Cholera.	Small-pox.	Fevers.	Dysentery and diarrhœa.
Delbi ... ..	...	1893	0·07	0·7	24·8	1·8	0·4	0·6	26·7	1·9
Ambala ... ..	...	1895	0·5	0·5	13·1	4·3	0·5	0·4	19·3	6·4
Simla ... ..	1893	1893	0·02	0·5	14·3	0·8	...	1·1	17·1	1·4
Lahore ... ..	...	1881	0·8	0·7	19·8	1·6	1·9	1·6	27·8	2·3
Dalhousie ... ..	...	1894	0·1	0·1	11·7	2·2	...	...	9·6	2·4
Gujranwala ... ..	1892	...	0·3	0·5	16·4	1·1	0·5	0·6	19·7	1·7
Rawalpindi ... ..	...	1887	0·7	0·3	21·3	2·3	0·5	0·1	16·4	3·4
Murree ... ..	...	1894	0·1	...	16·4	1·7	0·7	0·4	14·8	0·9
Kalka ... ..	...	1890	0·6	0·1	15·8	2·6	1·7	0·2	15·2	3·9

The works were begun in 1876 and completed in 1893.



# ANNUAL FORM No. I.

SHOWING THE BIRTHS REGISTERED IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1904.

1		2				3			4			5			6	7	8	9			10
No.	DISTRICTS.				POPULATION ACCORDING TO CENSUS OF 1901.*			NUMBER OF BIRTHS REGISTERED.			RATIO OF BIRTHS PER 1,000 OF POPULATION.			Number of males born to every 100 females born.	Excess of births over deaths per 1,000 of population.	Excess of deaths over births per 1,000 of population.	MEAN RATIO OF BIRTHS PER 1,000 DURING PREVIOUS FIVE YEARS.			No.	
					Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.				Males.	Females.	Total.		
					3	4	5	6	7	8	9	10	11				12	13	14		15
DELHI DIVISION.																					
1	Hissar	...	...	...	418,167	363,550	781,717	17,591	16,537	34,128	22.5	21.2	43.7	106.4	9.4	...	19.3	17.7	37.0	1	
2	Rohtak	...	...	...	333,217	297,455	630,672	14,582	13,508	28,090	23.1	21.4	44.5	108.0	7.5	...	19.8	18.1	37.9	2	
3	Gurgaon	...	...	...	390,443	355,765	746,208	18,240	16,673	34,913	24.4	22.3	46.8	109.4	...	2.8	23.3	20.4	42.7	3	
4	Delhi	...	...	...	370,103	316,895	686,998	16,359	15,568	31,927	23.8	22.7	46.5	105.1	10.0	...	22.0	20.5	42.5	4	
5	Karnal	...	...	...	478,953	404,272	883,225	18,821	16,861	35,682	21.3	19.1	40.4	111.6	3.0	...	21.5	19.3	40.7	5	
6	Ambala	...	...	...	419,742	343,508	763,250	14,346	13,048	27,394	18.8	17.1	35.9	109.9	...	26.7	20.3	18.3	38.6	6	
7	Simla	...	...	...	23,012	12,567	35,579	355	272	627	10.0	7.6	17.6	130.5	...	0.7	9.6	8.4	18.0	7	
JULLUNDUR DIVISION.																					
8	Kangra	...	...	...	396,484	367,957	764,441	14,353	13,135	27,488	18.8	17.2	36.0	109.3	6.6	...	17.9	16.8	34.7	8	
9	Hoshiarpur	...	...	...	525,854	463,928	989,782	21,131	19,446	40,577	21.3	19.7	41.0	108.7	...	14.2	21.3	19.4	40.7	9	
10	Jullundur	...	...	...	488,299	416,008	904,307	18,877	17,773	36,650	20.9	19.6	40.5	106.2	...	22.1	21.9	20.6	42.5	10	
11	Ludhiana	...	...	...	369,165	303,932	673,097	13,260	12,161	25,421	19.7	18.1	37.8	109.0	...	37.4	21.5	20.2	41.7	11	
12	Ferozepore	...	...	...	507,258	424,948	932,206	22,236	19,883	42,119	23.9	21.3	45.2	111.8	1.0	...	21.7	19.6	41.4	12	
LAHORE DIVISION.																					
13	Montgomery	...	...	...	268,606	229,100	497,706	10,761	9,686	20,447	21.6	19.5	41.1	111.1	19.6	...	19.6	17.6	37.2	13	
14	Lahore	...	...	...	629,360	516,669	1,146,029	26,316	23,785	50,101	23.0	20.8	43.7	110.6	...	5.3	22.6	20.1	42.7	14	
15	Amritsar	...	...	...	558,889	463,549	1,022,438	22,335	20,395	42,730	21.8	19.9	41.8	109.5	...	13.5	23.9	21.9	45.9	15	
16	Gurdaspur	...	...	...	507,488	429,296	936,784	19,744	18,082	37,826	21.1	19.3	40.4	109.2	...	38.8	24.1	22.4	46.6	16	
17	Sialkot	...	...	...	565,124	506,203	1,071,327	25,636	23,801	49,437	23.9	22.2	46.1	107.7	...	33.3	26.0	24.2	50.3	17	
18	Gujranwala	...	...	...	485,260	405,317	890,577	19,866	17,877	37,743	22.3	20.1	42.4	111.1	...	11.1	23.3	20.7	44.0	18	
RAWALPINDI DIVISION.																					
19	Gujrat	...	...	...	389,402	361,146	750,548	17,260	15,852	33,112	23.0	21.1	44.1	108.9	...	18.9	22.8	21.0	43.7	19	
20	Shahpur	...	...	...	273,144	251,115	524,259	9,847	8,571	18,418	18.8	16.3	35.1	114.9	...	62.2	21.6	19.8	41.4	20	
21	Jhelum	...	...	...	250,741	247,435	498,176	9,350	8,541	17,891	18.8	17.1	35.9	109.5	...	13.5	19.6	17.4	37.0	21	
22	Rawalpindi	...	...	...	270,855	246,906	517,761	9,922	9,172	19,094	19.2	17.7	36.9	108.2	3.6	...	19.9	17.9	37.8	22	
23	Attock	...	...	...	†239,962	220,935	460,897	10,159	8,859	19,018	22.0	19.2	41.3	114.7	10.6	...	21.2	19.0	40.2	23	
MULTAN DIVISION.																					
24	Mianwali	...	...	...	224,008	200,580	424,588	9,488	8,372	17,860	22.3	19.7	42.1	113.3	15.2	...	21.7	18.8	40.5	24	
25	Jhang§	...	...	...	559,295	443,361	1,002,656	23,148	20,884	44,032	23.1	20.8	43.9	110.8	13.6	...	20.5	18.3	38.8	25	
26	Multan	...	...	...	379,769	318,090	697,859	15,519	13,961	29,480	22.2	20.0	42.2	111.2	14.7	...	23.4	21.3	44.7	26	
27	Muzaffargarh	...	...	...	220,207	185,449	405,656	8,322	7,209	15,531	20.5	17.8	38.3	115.4	10.0	...	21.9	19.3	41.1	27	
28	Dera Ghazi Khan	...	...	...	255,448	214,499	469,947	8,854	7,459	16,313	18.8	15.9	34.7	118.7	13.0	...	17.9	14.8	32.7	28	
TOTAL		...	...	...	10,798,255	9,310,435	20,108,690	436,678	397,371	834,049	21.7	19.8	41.5	109.9	...	7.6	21.7	19.7	41.4		

\* Excluding population of military cantonments.

† The figures of Montgomery, Gujranwala and Jhang in this and other forms do not correctly represent the mean ratio for five years on account of the inclusion of the statistics of the Chenab Colony for shorter period.

‡ Figures for the whole year 1904 in this and the other forms.

§ The statistics of the new district of Lyallpur have not been shown separately this year, as it was constituted in the month of December, 1904.

STATEMENT OF BIRTHS AND DEATHS REGISTERED IN EACH

1	2								3	4	5			6	
Serial No.	DISTRICTS.								Area in square miles.	Average population per square mile.	POPULATION (CENSUS 1901).			BIRTHS.	
											Males.	Females.	Total.	Total number.	Birth-rate per 1,000 of population.
1	2								3	4	5	6	7	8	9
	DELHI DIVISION.														
1	Hissar	...	...	...	...	...	...	...	5,217	150	418,167	363,550	781,717	34,128	43·7
2	Rohtak	...	...	...	...	...	...	...	1,797	351	333,217	297,455	630,672	28,090	44·5
3	Gurgaon	...	...	...	...	...	...	...	1,984	376	390,443	355,765	746,208	34,913	46·8
4	Delhi	...	...	...	...	...	...	...	1,290	533	370,103	316,895	686,998	31,927	46·5
5	Karnal	...	...	...	...	...	...	...	3,153	286	478,953	494,272	883,225	35,882	40·4
6	Ambala	...	...	...	...	...	...	...	1,851	412	419,742	343,508	763,250	27,394	35·9
7	Simla	...	...	...	...	...	...	...	101	352	23,012	12,567	35,579	627	17·6
	JULLUNDUR DIVISION.														
8	Kangra	...	...	...	...	...	...	...	9,978	77	396,484	367,957	764,441	27,488	36·0
9	Hoshiarpur	...	...	...	...	...	...	...	2,244	441	525,854	463,928	989,782	40,577	41·0
10	Jullundur	...	...	...	...	...	...	...	1,431	632	488,299	416,008	904,307	36,650	40·5
11	Ludhiana	...	...	...	...	...	...	...	1,455	463	369,165	303,932	673,097	25,421	37·8
12	Ferozepore	...	...	...	...	...	...	...	4,202	217	507,258	424,948	932,206	42,119	45·2
	LAHORE DIVISION.														
13	Montgomery	...	...	...	...	...	...	...	4,771	104	268,606	229,100	497,706	20,447	41·1
14	Lahore	...	...	...	...	...	...	...	3,704	309	629,360	516,669	1,146,029	50,101	43·7
15	Amritsar	...	...	...	...	...	...	...	1,601	639	558,889	463,549	1,022,438	42,730	41·8
16	Gurdaspur	...	...	...	...	...	...	...	1,889	496	507,488	429,296	936,784	37,826	40·4
17	Sialkot	...	...	...	...	...	...	...	1,991	538	565,124	506,203	1,071,327	49,437	46·1
18	Gujranwala	...	...	...	...	...	...	...	3,198	278	485,260	405,317	890,577	37,743	42·4
	RAWALPINDI DIVISION.														
19	Gujrat	...	...	...	...	...	...	...	2,051	366	389,402	361,146	750,548	33,112	44·1
20	Shahpur	...	...	...	...	...	...	...	4,840	108	273,144	251,115	524,259	18,418	35·1
21	Jhelum	...	...	...	...	...	...	...	2,768	180	250,741	247,435	498,176	17,891	35·9
22	Rawalpindi...	...	...	...	...	...	...	...	2,046	253	270,855	246,906	517,761	19,094	36·9
23	Attock	...	...	...	...	...	...	...	4,212	109	239,962	220,935	460,897	19,018	41·3
	MULTAN DIVISION.														
24	Mianwali	...	...	...	...	...	...	...	7,816	54	224,008	200,580	424,588	17,860	42·1
25	Jhang	...	...	...	...	...	...	...	6,652	151	559,295	443,361	1,002,656	44,032	43·9
26	Multan	...	...	...	...	...	...	...	6,107	114	379,769	318,090	697,859	29,480	42·2
27	Muzaffargarh	...	...	...	...	...	...	...	3,635	112	220,207	185,449	405,656	15,531	38·3
28	Dera Ghazi Khan	...	...	...	...	...	...	...	5,306	89	255,448	214,499	469,947	16,313	34·7
	Total for the Province								97,209	207	10,798,255	9,310,435	20,108,690	834,049	41·5

NOTE.—Those born dead are not included



## No. II.

DISTRICT OF THE PUNJAB DURING THE YEAR 1904.

7			8	9											10			11
NUMBER OF DEATHS REGISTERED.			Number of deaths of males to every 100 deaths of females.	DEATHS PER 1,000 OF POPULATION FROM											MEAN RATIO OF DEATHS PER 1,000 DURING PREVIOUS FIVE YEARS.			Serial No.
Males.	Females.	Total.		Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	All causes.			Males.	Females.	Total.	
10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
13,821	13,025	26,846	106.1	0.3	1.4	3.8	20.7	0.4	1.1	0.3	6.4	33.1	35.8	34.3	48.7	49.8	49.2	1
11,854	11,449	23,303	103.5	0.1	0.6	6.8	20.5	0.4	0.8	0.2	7.5	35.6	38.5	37.0	42.8	42.9	42.9	2
18,452	18,551	37,003	99.5	...	2.4	9.6	24.5	1.2	1.2	0.5	10.3	47.3	52.1	49.6	38.7	39.1	38.9	3
12,688	12,404	25,092	102.3	0.003	0.2	1.3	22.2	0.9	2.9	0.3	8.7	34.3	39.1	36.5	41.2	45.0	42.9	4
17,443	15,611	33,054	111.7	0.1	0.6	2.4	23.8	0.5	2.1	0.3	7.7	36.4	38.6	37.4	48.6	52.8	50.5	5
23,357	24,338	47,740	95.8	0.01	1.2	25.7	19.6	1.5	6.3	0.3	8.0	55.7	71.0	62.6	48.6	57.7	52.7	6
379	273	652	138.8	...	0.1	0.2	5.5	1.3	6.6	0.1	4.6	16.5	21.7	18.3	19.4	26.1	21.7	7
11,450	11,044	22,494	103.7	0.1	0.01	0.04	18.0	0.9	2.9	0.4	7.2	28.9	30.0	29.4	32.3	34.4	33.3	8
25,288	29,318	54,606	86.3	0.1	0.1	28.6	15.2	0.6	5.4	0.3	4.9	48.1	63.2	55.2	36.7	43.7	40.0	9
25,652	30,964	56,616	82.8	0.1	0.1	35.1	14.0	0.6	5.3	0.2	7.2	52.5	74.4	62.6	39.6	52.9	45.7	10
25,276	25,349	50,625	99.7	0.01	0.4	50.5	11.8	0.3	2.7	0.3	9.2	68.5	83.4	75.2	53.7	67.6	59.9	11
20,377	20,777	41,154	98.1	0.001	1.1	14.0	18.6	0.4	1.5	0.3	8.3	40.2	48.9	44.2	47.9	54.2	50.8	12
5,591	5,124	10,715	109.1	0.004	0.5	0.8	12.0	0.3	0.5	0.4	7.1	20.8	22.4	21.5	27.3	5	*28.3	13
27,577	28,607	56,184	96.4	0.01	0.5	22.5	15.0	0.5	2.3	0.4	7.9	43.8	55.4	49.0	42.3	50.1	45.8	14
26,750	29,782	56,532	89.8	0.01	0.4	22.0	20.8	0.7	2.8	0.3	8.3	47.9	64.3	55.3	42.6	53.7	47.6	15
34,586	39,622	74,208	87.3	0.01	0.1	45.8	21.3	0.8	10.2	0.3	0.8	68.2	92.3	79.2	39.6	48.2	43.6	16
38,918	46,172	85,090	84.3	0.004	0.5	46.4	23.2	0.5	3.9	0.2	4.9	68.9	91.2	79.4	42.5	52.0	47.0	17
23,239	24,398	47,637	95.2	...	0.04	31.1	15.2	0.2	1.1	0.5	5.4	47.9	60.2	53.5	42.0	50.5	*45.9	18
21,944	25,340	47,284	86.6	...	0.3	39.7	14.8	0.3	2.8	0.2	4.8	56.4	70.2	63.0	30.9	32.8	31.8	19
24,792	26,216	51,008	94.6	0.01	0.1	71.1	16.7	0.7	1.2	0.5	7.1	90.8	104.4	97.3	29.7	30.5	30.1	20
11,432	13,160	24,592	86.9	...	0.3	22.1	17.9	0.7	1.4	0.4	6.6	45.6	53.2	49.4	32.5	31.5	32.0	21
8,788	8,444	17,232	104.1	0.003	0.2	1.3	22.5	1.2	1.2	0.4	6.4	32.5	34.2	33.3	32.1	33.0	32.6	22
7,214	6,915	14,129	104.3	...	1.1	0.03	22.5	0.4	0.9	0.4	5.4	30.1	31.3	30.7	28.8	29.0	28.9	23
5,962	5,472	11,434	109.0	...	0.1	0.01	21.7	0.5	0.4	0.3	3.9	26.6	27.3	26.9	27.6	27.8	27.7	24
15,766	14,564	30,330	108.3	0.01	0.2	4.4	17.0	0.7	1.0	0.3	6.5	28.2	32.9	30.3	26.9	29.9	*28.2	25
9,976	9,219	19,195	108.2	...	0.2	0.2	20.3	0.4	0.4	0.4	5.6	26.3	29.0	27.5	25.9	28.0	27.3	26
6,126	5,370	11,496	114.1	...	0.1	...	24.3	0.3	0.6	0.5	2.5	27.8	29.0	28.3	26.9	29.3	28.0	27
5,552	4,655	10,207	119.3	...	0.03	0.1	19.0	0.3	0.6	0.2	1.5	21.7	21.7	21.7	22.2	22.7	22.5	28
480,250	506,208	986,458	94.9	0.04	0.5	19.7	18.8	0.6	2.7	0.3	6.4	44.5	54.4	49.1	38.3	43.4	40.7	

in this or any other statement.

\* Vide foot-note at Form I.

## ANNUAL FORM No. III.

DEATHS REGISTERED IN THE DISTRICTS OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1904.

No.	DISTRICTS.													Total deaths registered during the year.	No.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	DELHI DIVISION.														
1	Hissar ... ..	2,172	2,128	2,551	2,446	2,419	2,115	1,494	1,414	2,111	2,521	2,581	2,886	26,846	1
2	Rohtak ... ..	1,864	1,515	2,426	2,534	1,816	1,422	1,311	1,438	1,811	2,208	2,476	2,474	23,303	2
3	Gurgaon ... ..	2,107	1,808	2,031	2,566	2,802	2,159	1,555	1,721	3,391	5,156	5,046	6,661	37,003	3
4	Delhi ... ..	1,982	1,753	1,979	1,999	2,109	1,795	1,449	1,672	2,210	2,694	2,687	2,763	25,092	4
5	Karnal ... ..	3,154	2,488	2,400	2,592	3,761	2,895	2,101	1,803	2,652	3,445	2,900	2,863	33,054	5
6	Ambala ... ..	4,438	4,872	7,131	8,570	4,529	2,288	1,476	1,564	2,410	3,361	3,237	3,864	47,740	6
7	Simla ... ..	45	48	37	37	53	55	55	71	75	73	61	42	652	7
	JULLUNDUR DIVISION.														
8	Kangra ... ..	2,045	1,690	1,847	1,527	2,220	2,025	1,569	1,750	2,214	1,990	1,495	2,122	22,494	8
9	Hoshiarpur ... ..	3,249	3,443	6,333	13,356	9,657	2,830	1,742	1,900	2,277	2,649	3,036	4,125	54,606	9
10	Jullundur ... ..	2,496	2,942	6,145	18,011	11,679	2,536	1,569	1,849	1,873	1,970	2,709	2,837	56,616	10
11	Ludhiana ... ..	6,832	7,880	12,664	9,993	3,523	1,338	1,048	1,103	1,327	1,541	1,823	1,553	50,625	11
12	Ferozepore ... ..	3,491	3,118	4,828	8,238	6,252	2,471	1,928	1,581	1,673	2,185	2,565	2,824	41,154	12
	LAHORE DIVISION.														
13	Montgomery ... ..	1,377	982	769	926	1,047	805	663	636	696	847	982	985	10,715	13
14	Lahore ... ..	3,250	2,865	5,390	13,028	13,698	3,582	2,060	1,995	1,957	2,428	2,810	3,121	56,184	14
15	Amritsar ... ..	3,569	3,473	5,250	9,830	11,850	3,962	2,203	2,094	2,273	3,177	4,033	4,818	56,532	15
16	Gurdaspur ... ..	5,299	5,980	10,231	20,211	13,426	3,260	1,940	1,834	2,496	2,937	2,960	3,634	74,208	16
17	Sialkot ... ..	4,885	6,007	13,656	26,797	16,123	3,572	2,154	2,070	2,340	2,605	2,549	2,332	85,090	17
18	Gujranwala ... ..	2,594	2,809	5,243	9,582	13,468	4,282	1,233	1,544	1,255	1,268	2,250	2,109	47,637	18
	RAWALPINDI DIVISION.														
19	Gujrat ... ..	2,114	2,127	4,628	11,416	13,298	4,035	1,259	1,198	1,422	1,727	2,052	2,008	47,284	19
20	Shahpur ... ..	2,648	2,704	7,575	17,889	11,419	2,550	1,045	781	792	892	1,241	1,472	51,008	20
21	Jhelum ... ..	1,866	1,226	1,586	5,558	6,139	1,455	818	883	939	1,304	1,423	1,395	24,592	21
22	Rawalpindi ... ..	2,035	1,375	1,147	1,120	1,349	1,167	951	1,076	1,359	1,931	1,981	1,741	17,232	22
23	Attock ... ..	2,009	1,152	1,044	922	1,059	958	925	906	898	1,325	1,478	1,453	14,129	23
	MULTAN DIVISION.														
24	Mianwali ... ..	1,504	1,041	943	840	1,039	844	700	595	722	865	1,121	1,220	11,434	24
25	Jhang ... ..	3,478	2,424	2,414	3,986	4,291	2,297	1,688	1,492	1,573	1,886	2,191	2,610	30,330	25
26	Multan ... ..	2,162	1,678	1,428	1,368	1,779	1,427	1,151	1,181	1,372	1,784	1,940	1,925	19,195	26
27	Muzaffargarh ... ..	1,424	1,054	875	701	1,033	812	723	614	746	1,180	1,222	1,112	11,496	27
28	Dera Ghazi Khan ... ..	1,144	859	962	667	736	919	552	523	813	851	963	1,218	10,207	28
	Total for the Province	75,233	71,441	113,513	196,710	162,574	59,865	37,362	37,288	45,693	56,800	61,812	68,167	986,458	
	Ratio of deaths per 1,000 in each month.	3.74	3.55	5.65	9.78	8.09	2.98	1.86	1.85	2.27	2.83	3.07	3.36	49.06	



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ANNUAL FORM No. IV.

DEATHS REGISTERED ACCORDING TO AGE IN THE DISTRICTS OF THE  
PUNJAB DURING THE YEAR 1904.

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## ANNUAL FORM

DEATHS REGISTERED ACCORDING TO AGE IN THE

1 Number.	2 DISTRICTS.				3 UNDER ONE YEAR.		4 ONE YEAR AND UNDER 5 YEARS.		5 5 YEARS AND UNDER 10 YEARS.		6 10 YEARS AND UNDER 15 YEARS.		7 15 YEARS AND UNDER 20 YEARS.	
					Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	2				3	4	5	6	7	8	9	10	11	12
	DELHI DIVISION.													
1	Hissar	...	...	...	3,906	3,200	2,195	2,180	740	797	609	650	490	457
2	Rohtak	...	...	...	3,078	2,640	946	913	874	906	883	932	802	890
3	Gurgaon	...	...	...	4,223	3,902	3,567	3,610	1,232	1,364	885	921	646	588
4	Delhi	...	...	...	3,877	3,615	1,903	1,917	541	501	339	378	369	435
5	Karnal	...	...	...	4,533	3,908	2,527	2,172	745	662	676	663	670	544
6	Ambala	...	...	...	3,873	3,790	2,467	2,372	1,186	1,362	1,402	1,775	1,381	1,263
7	Simla	...	...	...	105	71	21	37	4	7	9	8	14	9
	JULLUNDUR DIVISION.													
8	Kangra	...	...	...	3,939	3,374	1,094	1,145	416	398	323	291	305	497
9	Hoshiarpur...	...	...	...	4,833	4,542	2,946	3,206	1,232	1,647	1,641	2,129	1,291	1,493
10	Jullundur	...	...	...	4,500	5,016	2,326	2,397	2,060	2,584	1,931	2,685	1,555	1,905
11	Ludhiana	...	...	...	3,517	3,614	1,814	1,783	1,583	1,791	2,169	2,564	1,869	1,669
12	Ferozepore...	...	...	...	4,945	4,459	2,253	2,046	1,202	1,314	1,262	1,667	1,106	1,157
	LAHORE DIVISION.													
13	Montgomery	...	...	...	2,074	1,788	713	683	205	219	149	183	129	136
14	Lahore	...	...	...	5,513	5,106	3,053	2,866	1,841	2,338	2,031	2,699	1,617	1,818
15	Amritsar	...	...	...	5,264	5,522	2,799	2,689	1,735	1,993	1,782	2,266	1,444	1,658
16	Gurdaspur	...	...	...	5,232	4,604	4,060	4,155	2,087	2,776	2,623	3,532	2,018	2,259
17	Sialkot	...	...	...	5,214	5,043	4,109	4,430	3,428	4,694	3,734	4,731	3,639	4,335
18	Gujranwala	...	...	...	3,560	3,334	2,335	2,214	2,008	2,456	1,861	2,258	1,217	1,253
	RAWALPNDI DIVISION.													
19	Gujrat	...	...	...	3,024	2,859	2,460	2,486	1,750	2,275	1,597	2,169	1,353	1,601
20	Shahpur	...	...	...	2,428	1,920	2,196	2,166	2,362	2,815	2,290	2,765	1,921	2,094
21	Jhelum	...	...	...	1,922	1,897	1,172	1,222	765	936	689	879	499	649
22	Rawalpindi	...	...	...	2,214	2,076	1,281	1,269	484	480	339	336	234	267
23	Attock	...	...	...	1,902	1,816	1,489	1,401	471	511	204	195	161	175
	MULTAN DIVISION.													
24	Mianwali	...	...	...	1,990	1,757	841	836	327	291	164	119	126	99
25	Jhang	...	...	...	4,935	4,724	1,732	1,546	831	827	621	615	597	594
26	Multan	...	...	...	3,547	3,385	1,377	1,323	459	442	244	276	183	188
27	Muzaffargarh	...	...	...	1,769	1,518	729	727	339	243	206	145	138	125
28	Dera Ghazi Khan...	...	...	...	1,693	1,352	769	662	261	214	173	164	156	173
	Total for the Province				97,610	90,832	55,174	54,453	31,168	36,843	30,836	37,995	25, 30	28,331
	Ratio per 1,000 living				286.44	287.85	52.34	55.93	20.84	28.69	22.82	37.36	26.15	35.96



## No. IV.

## DISTRICTS OF THE PUNJAB DURING THE YEAR 1904.

8		9		10		11		12		13		14
20 YEARS AND UNDER 30 YEARS.		30 YEARS AND UNDER 40 YEARS.		40 YEARS AND UNDER 50 YEARS.		50 YEARS AND UNDER 60 YEARS.		60 YEARS AND UPWARDS.		TOTAL.		
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Number.
13	14	15	16	17	18	19	20	21	22	23	24	25
1,209	1,235	964	1,014	1,134	969	999	828	1,575	1,695	13,821	13,025	1
957	1,052	961	1,013	981	962	1,094	989	1,278	1,152	11,854	11,449	2
1,595	1,606	1,546	1,721	1,449	1,425	1,334	1,231	1,975	2,183	18,452	18,551	3
1,070	1,172	983	1,103	969	855	1,168	1,023	1,469	1,405	12,688	12,404	4
1,594	1,444	1,626	1,617	1,676	1,444	1,450	1, 16	1,946	1,941	17,443	15,611	5
2,743	2,679	2,650	3,008	2,675	2,695	2,086	2,261	2,894	3,178	23,357	24,383	6
60	36	41	33	44	18	29	12	52	42	379	273	7
791	1,292	860	971	925	761	896	655	1,901	1,660	11,450	11,044	8
2,415	3,194	2,698	3,492	2,501	2,873	2,221	2,415	3,510	4,327	25,288	29,318	9
2,519	3,198	2,515	3,327	2,412	2,899	2,144	2,325	3,690	4,628	25,652	30,964	10
3,259	2,941	2,960	2,869	2,841	2,982	2,252	2,263	3,012	2,873	25,276	25,349	11
1,954	2,210	1,750	2,124	1,862	1,950	1,637	1,574	2,406	2,276	20,377	20,777	12
278	328	291	318	359	315	381	338	1,012	816	5,591	5,124	13
3,037	3,492	2,635	2,748	2,341	2,432	1,916	1,727	3,593	3,381	27,577	28,607	14
2,567	3,308	2,368	3,067	2,361	2,827	2,112	2,173	4,318	4,279	26,750	29,782	15
3,963	4,924	3,782	4,809	3,608	4,336	2,730	3,086	4,483	5,141	34,586	39,622	16
4,132	5,063	3,831	4,806	3,541	4,319	3,206	4,326	4,084	4,425	38,918	46,172	17
2,780	2,940	2,462	2,941	2,082	2,429	1,664	1,582	3,270	2,991	23,239	24,398	18
2,503	2,912	2,473	3,102	2,137	2,667	1,647	2,086	3,000	3,183	21,944	25,340	19
2,690	2,975	2,643	3,018	2,516	2,800	2,136	2,190	3,610	3,473	24,792	26,216	20
1,132	1,559	1,205	1,572	1,153	1,330	911	1,024	1,984	2,092	11,432	13,160	21
617	742	802	827	726	650	618	463	1,473	1,334	8,788	8,444	22
471	521	565	602	478	488	493	382	980	824	7,214	6,915	23
321	346	393	469	361	366	464	357	975	832	5,962	5,472	24
1,007	1,022	1,094	1,192	1,157	1,060	1,049	876	2,743	2,108	15,766	14,564	25
510	660	657	658	693	552	643	434	1,663	1,301	9,976	9,219	26
398	507	519	537	536	394	485	341	1,007	833	6,126	5,370	27
694	622	497	461	394	318	326	273	569	416	5,552	4,655	28
47,266	53,980	45,771	53,419	43,912	47,116	38,091	38,450	64,492	64,789	480,250	506,208	
26·67	33·45	30·69	40·78	41·03	50·09	54·47	66·48	97·34	116·47	44·47	54·37	

## ANNUAL FORM No. V.

DEATHS REGISTERED ACCORDING TO CLASSES IN THE DISTRICTS OF THE PUNJAB DURING THE YEAR 1904.

2		3					4					5					6
Number.	DISTRICTS.	POPULATION ACCORDING TO CENSUS OF 1901.					NUMBER OF DEATHS REGISTERED.					RATIO OF DEATHS PER 1,000 OF POPULATION.					Number.
		Muhammadans.	Hindus.	Native Christians.	Other classes.	Total.	Muhammadans.	Hindus.	Native Christians.	Other classes.	Total.	Muhammadans.	Hindus.	Native Christians.	Other classes.	Total.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	DELHI DIVISION.																
1	Hissar ...	202,009	579,444	53	211	781,717	6,516	20,330	...	...	26,846	32·26	35·09	...	...	34·34	1
2	Rohtak ...	91,687	538,904	41	40	630,672	3,607	19,696	...	...	23,303	33·34	36·55	...	...	36·95	2
3	Gurgaon ...	242,548	503,381	221	58	746,208	10,227	26,765	10	1	37,003	42·16	53·17	45·25	17·24	49·59	3
4	Delhi ...	166,655	517,633	2,042	668	686,998	5,824	19,152	61	55	25,092	34·95	37·00	29·87	82·34	36·52	4
5	Karnal ...	241,412	640,630	225	958	883,225	8,867	24,186	1	...	33,054	36·73	37·75	4·44	...	37·42	5
6	Ambala ...	224,679	537,612	959	...	763,250	14,099	33,636	5	...	47,740	62·75	62·57	5·21	...	62·55	6
7	Simla ...	5,560	27,770	368	1,881	35,579	123	523	6	...	652	22·12	18·83	16·30	...	18·33	7
	JULLUNDUR DIVISION.																
8	Kangra ...	39,534	720,389	203	4,315	764,441	1,134	21,360	...	...	22,494	28·68	29·65	...	...	29·43	8
9	Hoshiarpur ...	312,958	676,009	785	30	989,782	18,807	35,793	6	...	54,606	60·09	52·95	7·64	...	55·17	9
10	Jullundur ...	416,691	487,234	276	106	904,307	28,059	28,557	...	...	56,616	67·34	58·61	...	...	62·61	10
11	Ludhiana ...	235,937	436,212	415	533	673,097	22,329	28,285	10	1	50,625	94·64	64·84	24·10	1·88	75·21	11
12	Ferozepore ...	436,995	494,966	240	5	932,206	20,879	26,274	1	...	41,154	47·78	40·96	4·17	...	44·15	12
	LAHORE DIVISION.																
13	Montgomery	355,892	141,439	314	61	497,706	7,992	2,723	...	...	10,715	22·46	19·25	...	...	21·53	13
14	Lahore ...	711,171	428,753	2,990	3,115	1,146,029	39,504	16,639	36	5	56,184	55·55	38·81	12·04	1·61	49·02	14
15	Amritsar ...	474,457	546,208	1,492	281	1,022,438	25,878	30,630	24	...	56,532	54·54	56·08	16·09	...	55·29	15
16	Gurdaspur ...	462,996	469,346	4,198	244	936,784	37,765	36,296	135	12	74,208	81·57	77·33	32·16	49·18	79·22	16
17	Sialkot ...	710,778	349,867	10,662	26	1,071,327	53,180	30,783	428	699	85,090	74·82	87·98	40·14	?	79·42	17
18	Gujranwala ...	603,464	281,439	5,592	82	890,577	36,501	10,809	141	186	47,637	60·49	38·41	25·21	?	53·49	18
	RAWALPINDI DIVISION.																
19	Gujrat ...	655,838	94,250	241	219	750,548	42,580	4,699	3	2	47,284	64·92	49·86	12·45	9·13	63·00	19
20	Shahpur ...	442,921	81,247	21	70	524,259	46,078	4,930	...	...	51,008	104·03	60·68	...	...	97·30	20
21	Jhelum ...	442,519	55,445	110	102	498,176	22,349	2,243	...	...	24,592	50·50	40·45	...	...	49·36	21
22	Rawalpindi ...	451,850	65,136	225	550	517,761	15,292	1,823	4	113	17,232	33·84	27·99	17·78	205·45	33·28	22
23	Attock ...	418,142	42,465	290	...	460,897	13,191	930	...	8	14,129	31·55	21·90	...	?	30·66	23
	MULTAN DIVISION.																
24	Mianwali ...	371,674	52,870	16	28	424,588	9,989	1,436	1	8	11,434	26·88	27·16	62·50	285·71	26·93	24
25	Jhang ...	687,164	309,999	5,420	73	1,002,656	21,630	8,498	188	14	30,330	31·48	27·41	34·69	191·78	30·25	25
26	Multan ...	565,557	131,852	198	252	697,859	15,445	3,747	1	2	19,195	27·31	28·42	5·05	7·94	27·51	26
27	Muzaffargarh	350,177	55,446	17	16	405,656	9,956	1,532	...	8	11,496	28·43	27·63	...	500·00	28·34	27
28	D. G. Khan ...	411,315	58,530	81	21	469,947	8,727	1,438	...	42	10,207	21·22	24·57	...	?	21·72	28
Total for the Province.		10,732,580	9,324,476	37,695	13,939	20,108,690	546,528	437,713	1,061	1,156	986,458	50·92	46·94	28·15	*82·93	49·06	

\* Figures incorrect, due to misclassification.



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ANNUAL FORM No. VI.

DEATHS REGISTERED FROM DIFFERENT CAUSES IN THE DISTRICTS (RURAL CIRCLES)  
OF THE PUNJAB DURING THE YEAR 1904.

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## ANNUAL FORM

## DEATHS REGISTERED FROM DIFFERENT CAUSES IN THE DISTRICTS

1	2	3	4	5	6	7	8	9	10		
Number.	A.—RURAL CIRCLES.	Population according to census of 1901.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and diarrhoea.	Respiratory diseases.	INJURY		
									Suicide.		Wounding and accidents.
									Males.	Females.	
1	2	3	4	5	6	7	8	9	10	11	12
DELHI DIVISION.											
1	Hissar ... ..	693,044	228	710	1,688	14,729	174	531	...	2	139
2	Rohtak ... ..	576,415	67	187	2,859	12,026	129	307	1	4	95
3	Gurgaon .. ...	678,503	...	1,499	5,395	17,317	716	635	22	43	227
4	Delhi ... ..	457,658	...	75	590	9,189	265	437	4	16	95
5	Karnal ... ..	799,607	67	308	1,644	19,790	235	1,395	1	2	159
6	Ambala .. ...	698,479	4	868	17,839	14,223	987	4,529	3	2	129
7	Simla ... ..	21,449	...	2	5	84	34	94	...	...	1
JULLUNDUR DIVISION.											
8	Kangra ... ..	751,945	46	10	33	13,590	638	2,156	6	15	226
9	Hoshiarpur ... ..	923,773	78	44	26,894	14,159	376	4,938	5	7	179
10	Jullundur ... ..	789,950	96	73	26,298	11,595	295	3,804	5	8	142
11	Ludbiana ... ..	586,569	4	237	31,522	7,092	131	1,371	7	8	156
12	Ferozepore .. ...	881,750	1	991	12,581	16,295	278	1,217	16	20	167
LAHORE DIVISION.											
13	Montgomery ... ..	477,936	2	229	262	5,787	120	188	2	...	120
14	Lahore ... ..	906,019	1	507	22,440	13,820	208	858	9	9	223
15	Amritsar ... ..	842,818	11	142	20,929	17,037	440	1,512	10	9	198
16	Gurdaspur ... ..	871,990	9	80	40,806	18,668	562	8,967	7	4	173
17	Sialkot ... ..	994,914	5	356	48,347	23,786	410	3,510	...	1	186
18	Gujranwala ... ..	802,306	...	26	26,299	12,303	105	605	14	3	229
RAWALPINDI DIVISION.											
19	Gujrat ... ..	709,017	...	243	29,478	10,533	192	1,795	2	1	126
20	Shahpur ... ..	471,938	2	38	35,381	7,874	222	503	...	1	163
21	Jhelum ... ..	472,703	...	122	10,388	8,551	272	659	3	1	160
22	Rawalpindi... ..	469,167	...	86	613	10,998	499	407	5	...	150
23	Attock ... ..	442,646	...	488	13	10,091	140	369	1	2	136
MULTAN DIVISION.											
24	Mianwali ... ..	395,033	...	39	1	8,654	167	147	5	1	100
25	Jhang ... ..	954,602	7	192	3,639	16,578	662	966	1	3	205
26	Multan ... ..	601,975	...	80	35	12,494	71	68	3	1	178
27	Muzaffargarh ... ..	393,253	...	53	...	9,647	77	187	...	..	134
28	Dera Ghazi Khan ... ..	428,705	...	12	1	8,340	62	184	1	1	61
Total of the Rural Circles ...		18,094,164	628	7,787	367,980	245,250	8,467	42,339	133	164	4,257



## No. VI.

(RURAL CIRCLES) OF THE PUNJAB DURING THE YEAR 1904.

		11	12	13										14
RIES.				RATIO OF DEATHS PER 1,000 OF POPULATION.										
Snake-bite and, killed by wild beasts.	Total.	All other causes.	Total deaths from all causes.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	For the year.	Mean ratio of previous five years.	Number.
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
55	196	3,870	22,126	0·33	1·02	2·44	21·25	0·25	0·77	0·28	5·58	31·93	47·25	1
26	126	4,097	19,798	0·12	0·32	4·96	20·86	0·22	0·53	0·22	7·11	34·35	42·99	2
36	328	6,829	32,719	...	2·21	7·95	25·52	1·06	0·94	0·48	10·06	48·22	38·45	3
39	154	4,370	15,080	...	1·16	1·29	20·08	0·58	0·93	0·34	9·55	32·95	41·26	4
57	219	5,879	29,627	0·08	0·50	2·06	24·75	0·29	1·74	0·27	7·35	37·05	49·63	5
32	166	5,535	44,151	0·01	1·24	25·54	20·36	1·41	6·48	0·24	7·92	63·21	53·16	6
...	1	72	292	...	0·09	0·23	3·92	1·59	4·38	0·05	3·36	13·61	16·15	7
46	293	5,389	22,155	0·06	0·01	0·04	18·07	0·85	2·87	0·39	7·17	29·46	33·23	8
37	228	4,488	51,205	0·08	0·05	29·11	15·33	0·41	5·35	0·25	4·86	55·43	39·63	9
13	168	5,682	50,011	0·12	0·09	35·82	14·68	0·37	4·82	0·21	7·19	63·31	46·07	10
3	174	5,509	46,040	0·01	0·35	45·91	10·33	0·19	2·00	0·25	8·02	67·06	59·55	11
16	219	7,341	38,923	0·001	1·12	14·27	18·48	0·32	1·38	0·25	8·33	44·14	50·87	12
78	200	3,370	10,158	0·004	0·48	0·55	12·11	0·25	0·39	0·42	7·05	21·25	28·33	13
91	332	7,528	45,694	0·001	0·56	24·77	15·25	0·23	0·95	0·37	8·31	50·43	46·93	14
23	240	7,695	48,006	0·01	0·17	24·83	20·21	0·52	1·79	0·28	9·13	56·96	47·59	15
24	208	500	69,800	0·01	0·09	46·80	21·41	0·64	10·28	0·24	0·57	80·05	43·58	16
45	232	4,701	81,347	0·01	0·36	48·59	23·91	0·41	3·53	0·23	4·73	81·76	46·98	17
108	354	4,232	43,924	...	0·03	32·73	15·33	0·13	0·75	0·44	5·27	54·75	46·55	18
32	161	3,384	45,786	...	0·34	41·58	14·86	0·27	2·53	0·23	4·77	64·58	31·40	19
57	221	3,190	47,431	0·001	0·08	71·97	16·63	0·47	1·07	0·47	6·76	100·50	29·72	20
40	204	3,112	23,308	...	0·26	31·98	18·09	0·58	1·39	0·43	6·58	49·31	31·67	21
43	198	2,909	15,719	...	0·18	1·31	23·44	1·06	0·87	0·42	6·20	33·48	31·99	22
16	155	2,358	13,611	...	1·10	0·03	22·80	0·32	0·83	0·35	8·33	30·76	28·78	23
22	128	1,488	10,624	...	0·10	0·003	21·91	0·42	0·37	0·32	3·77	26·89	27·71	24
72	251	5,946	28,271	0·01	0·20	3·81	17·37	0·69	1·01	0·29	6·23	29·62	27·31	25
77	259	3,267	16,274	...	0·13	0·06	20·76	0·12	0·11	0·43	5·43	27·03	27·74	26
70	204	884	11,052	...	0·13	...	24·53	0·29	0·48	0·52	2·25	28·10	28·38	27
36	99	482	9,180	...	0·03	0·002	19·45	0·14	0·43	0·23	1·13	21·41	21·91	28
1,194	5,745	114,107	892,306	0·03	0·43	20·34	19·08	0·47	2·31	0·32	6·31	49·31	37·27	

## DEATHS REGISTERED FROM DIFFERENT CAUSES IN THE

1	2	3	4	5	6	7	8	9	10				
No.	B.—TOWNS.	Population according to census of 1901.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	INJURIES.				
									Suicide.		Wounding and accidents.	Snake-bite and killed by wild beasts.	Total.
									Males.	Females.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
HISSAR DISTRICT.													
1	Hissar ... ..	17,647	...	44	7	298	17	77	...	...	8	3	11
2	Hansi ... ..	16,523	...	96	121	204	39	67	...	...	4	2	6
3	Bhiwani ... ..	35,917	...	239	1,129	532	73	133	...	...	8	3	11
4	Sirsa ... ..	15,800	...	11	1	379	14	26	...	...	1	1	2
5	Fatthabad ... ..	2,786	...	2	...	56	1	8	...	...	...	...	...
ROHTAK DISTRICT.													
6	Rohtak ... ..	19,766	...	73	509	386	24	45	...	1	2	1	4
7	Jhajjar ... ..	12,227	1	113	289	135	36	46	...	...	3	...	3
8	Beri ... ..	9,723	...	1	532	116	17	86	...	...	1	1	2
9	Gohana ... ..	6,567	1	16	93	127	15	20	...	...	1	...	1
10	Bahadurgarh ... ..	5,974	...	11	...	161	15	6	...	...	1	...	1
GURGAON DISTRICT.													
11	Rewari ... ..	27,295	...	142	180	192	61	105	...	...	12	1	13
12	Palwal ... ..	12,830	...	27	785	152	30	41	1	1	2	1	5
13	Farrukhnagar ... ..	6,136	...	20	4	135	26	19	...	...	1	...	1
14	Firozpur ... ..	7,278	...	42	2	184	22	15	...	...	3	2	5
15	Sohana ... ..	6,024	...	11	2	128	23	14	...	...	...	...	...
16	Hodal ... ..	8,142	...	16	802	145	42	48	...	...	6	3	9
DELHI DISTRICT.													
17	Delhi ... ..	206,534	2	61	267	5,584	317	1,475	1	1	23	1	26
18	Sonepat ... ..	12,990	...	4	...	275	32	41	...	...	4	...	4
19	Balabgarh ... ..	4,506	...	13	...	96	13	9	...	...	2	1	3
20	Faridabad ... ..	5,310	...	12	...	125	20	10	...	...	1	1	2
KARNAL DISTRICT.													
21	Karnal ... ..	22,703	...	13	101	323	53	113	...	1	9	...	10
22	Kaithal ... ..	14,408	...	8	...	298	21	62	...	...	6	1	7
23	Panipat ... ..	26,914	...	8	1	412	54	133	...	...	5	1	6
24	Ladwa ... ..	3,518	...	...	29	33	4	15	...	...	1	...	1
25	Shahabad ... ..	11,009	...	44	330	125	32	102	...	...	2	...	2
26	Thanesar ... ..	5,066	...	30	8	73	13	24	...	...	3	3	6
AMBALA DISTRICT.													
27	Ambala ... ..	26,744	2	13	1,179	198	60	125	...	...	8	...	8
28	Jagadhri ... ..	13,462	...	...	226	237	52	67	...	...	6	...	6
29	Burya ... ..	5,865	...	3	77	105	23	29	...	...	1	1	2
30	Sadhaura ... ..	9,812	...	2	240	130	19	20	...	...	7	...	7
31	Rupar ... ..	8,888	...	10	27	71	21	34	...	...	2	...	2
SIMLA DISTRICT.													
32	Simla ... ..	14,130	...	...	1	111	13	142	...	...	3	...	3
KANGRA DISTRICT.													
33	Kangra ... ..	4,746	...	...	1	53	13	27	...	...	1	...	1
34	Dharamsala ... ..	3,288	...	...	...	32	5	10	...	...	2	...	2
35	Narpar ... ..	4,462	...	...	...	72	8	27	...	...	1	...	1
HOSHIARPUR DISTRICT.													
36	Hoshiarpur ... ..	17,037	53	1	416	160	64	147	...	...	7	1	8
37	Khanpur ... ..	3,183	2	...	43	37	14	15	...	...	...	...	...
38	Hariana ... ..	6,005	2	1	236	45	19	45	...	...	3	...	3
39	Garhdiwala ... ..	3,652	...	...	158	23	8	19	...	...	4	...	4
40	Dasgah ... ..	6,404	...	1	58	145	16	30	...	...	2	1	3
41	Tanda Urmar ... ..	10,247	...	...	312	159	22	42	...	...	4	1	5
42	Miani ... ..	6,118	...	...	67	103	23	16	...	...	1	...	1
43	Mukerian ... ..	3,589	...	...	119	110	13	33	...	...	2	...	2
44	Una ... ..	4,746	...	...	1	72	6	17	...	...	1	...	1
45	Anandpur ... ..	5,028	...	1	36	66	17	10	...	...	1	...	1
JULLUNDUR DISTRICT.													
46	Jullundur ... ..	54,455	3	2	1,929	463	132	399	1	2	13	...	16
47	Alawalpur ... ..	4,423	...	...	192	21	13	19	...	...	...	...	...
48	Kartarpur ... ..	10,840	1	...	190	118	26	49	...	...	...	2	2
49	Bungah ... ..	4,697	...	...	143	44	9	21	...	...	1	...	1
50	Rahon ... ..	8,651	...	...	185	82	14	180	...	...	4	...	4
51	Nawashahr ... ..	5,641	...	...	341	55	16	37	...	...	1	...	1
52	Phillour ... ..	6,986	1	4	87	85	36	117	...	...	1	...	1
53	Nurmahal ... ..	8,706	...	4	156	111	20	73	...	...	2	...	2
54	Nakodar ... ..	9,958	...	...	239	78	17	59	...	...	4	4	8



No. VI.

TOWNS OF THE PUNJAB DURING THE YEAR 1904.

11	12	13										14
All other causes.	Total deaths from all causes.	RATIO OF DEATHS PER 1,000 OF POPULATION.										No.
		Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diar- rhoea.	Respiratory diseases.	Injuries.	All other causes.	From all causes.		
										For the year.	Mean of pre- vious five years.	
15	16	17	18	19	20	21	22	23	24	25	26	27
225	679	...	2.49	0.40	16.89	0.96	4.36	0.62	12.75	38.48	63.73	1
275	808	...	5.81	7.32	12.35	2.36	4.05	0.36	16.64	48.90	53.36	2
491	2,608	...	6.65	31.43	14.81	2.03	3.70	0.31	13.67	72.61	67.25	3
122	555	...	0.70	0.06	23.99	0.89	1.65	0.13	7.72	35.13	73.04	4
3	70	...	0.72	...	20.10	0.36	2.87	...	1.08	25.13	58.36	5
275	1,316	...	3.69	25.75	19.53	1.21	2.28	0.20	13.91	66.58	36.30	6
174	797	0.08	9.24	23.64	11.04	2.94	3.76	0.25	14.23	65.18	38.44	7
87	841	...	0.10	54.72	11.93	1.75	8.84	0.21	8.95	86.50	47.60	8
57	330	0.15	2.44	14.16	19.34	2.28	3.05	0.15	8.68	50.25	46.99	9
24	221	...	1.84	...	27.45	2.51	1.06	0.17	4.02	36.99	47.87	10
350	1,048	...	5.20	6.59	7.03	2.23	3.85	0.48	12.82	38.21	44.39	11
186	1,226	...	2.10	61.18	11.85	2.84	3.20	0.39	14.50	95.56	42.53	12
60	265	...	3.26	0.65	22.00	4.24	3.10	0.16	9.78	43.19	41.40	13
60	330	...	5.77	0.27	25.28	3.02	2.06	0.69	8.24	45.34	41.03	14
58	236	...	1.83	0.33	21.25	3.82	2.32	...	9.63	39.18	49.93	15
122	1,184	...	1.97	98.50	17.81	5.16	5.90	1.11	14.98	145.42	39.11	16
1,516	9,248	0.01	0.30	1.29	27.04	1.53	7.14	0.13	7.34	44.78	47.18	17
81	437	...	0.31	...	21.17	2.46	3.16	0.31	6.24	33.64	37.31	18
15	149	...	2.89	...	21.30	2.89	2.00	0.67	3.33	33.07	39.99	19
9	178	...	2.26	...	23.54	3.77	1.88	0.38	1.69	33.52	37.55	20
253	866	...	0.57	4.45	14.23	2.33	4.98	0.44	11.14	38.14	61.93	21
185	581	...	0.56	...	20.68	1.46	4.30	0.49	12.84	40.32	90.13	22
359	973	...	0.30	0.04	15.31	2.01	4.94	0.22	13.34	36.15	50.56	23
25	107	...	...	8.24	9.38	1.14	4.26	0.28	7.11	30.42	63.62	24
73	708	...	4.00	29.98	11.35	2.91	9.27	0.18	6.63	64.31	43.09	25
33	192	...	5.92	1.58	14.41	2.57	5.72	1.18	6.51	37.90	37.86	26
176	1,761	0.07	0.49	44.08	7.40	2.24	4.67	0.30	6.58	65.85	49.15	27
218	806	...	...	16.79	17.61	3.86	4.98	0.45	16.19	59.87	42.09	28
102	341	...	0.51	13.13	17.90	3.92	4.94	0.34	17.39	58.14	49.31	29
51	469	...	0.20	24.46	13.25	1.94	2.04	0.71	5.20	47.80	41.50	30
47	212	...	1.13	3.04	7.99	2.36	3.83	0.23	5.29	23.85	57.81	31
90	360	...	...	0.07	7.86	0.92	10.05	0.21	6.37	25.48	30.22	32
40	135	...	...	0.21	11.17	2.74	5.69	0.21	8.43	28.44	38.18	33
15	64	...	...	...	9.73	1.52	3.04	0.61	4.56	19.46	30.84	34
32	140	...	...	...	16.14	1.79	6.05	0.22	7.17	31.38	39.94	35
113	962	3.11	0.06	24.42	9.39	3.76	8.63	0.47	6.63	56.47	44.39	36
20	131	0.63	...	13.51	11.62	4.40	4.71	...	6.28	41.16	62.46	37
33	384	0.33	0.17	39.30	7.49	3.16	7.49	0.50	5.50	63.95	40.20	38
31	243	...	...	43.26	6.30	2.19	5.20	1.10	8.49	66.54	40.96	39
42	295	...	0.16	9.06	22.64	2.50	4.68	0.47	6.56	46.06	46.35	40
30	570	...	...	30.45	15.52	2.15	4.10	0.49	2.93	55.63	47.99	41
30	240	...	...	10.95	16.84	3.76	2.62	0.16	4.90	39.23	34.82	42
16	293	...	...	33.16	30.65	3.62	9.19	0.56	4.46	81.64	59.18	43
26	123	...	...	0.21	15.17	1.26	3.58	0.21	5.48	25.92	33.80	44
29	160	...	0.20	7.16	13.13	3.38	1.98	0.20	5.77	31.82	43.24	45
375	3,319	0.06	0.04	35.42	8.50	2.42	7.33	0.29	6.89	60.95	38.36	46
24	279	...	...	43.41	7.01	2.94	4.30	...	5.42	63.08	36.40	47
87	473	0.09	...	17.53	10.89	2.40	4.52	0.18	8.03	43.63	39.41	48
44	262	...	...	30.44	9.37	1.92	4.47	0.21	9.27	55.78	42.75	49
38	503	...	...	21.38	9.48	1.62	20.81	0.46	4.39	58.14	61.87	50
54	504	...	...	60.45	9.75	2.84	6.56	0.18	9.57	89.35	47.86	51
55	386	0.14	0.57	12.45	12.17	5.15	16.75	0.14	7.87	55.25	54.65	52
65	431	...	0.46	17.92	12.75	2.30	8.39	0.23	7.47	49.51	54.15	53
47	448	...	...	24.00	7.83	1.71	5.92	0.80	4.72	44.99	43.20	54

## ANNUAL FORM

## DEATHS REGISTERED FROM DIFFERENT CAUSES IN THE

1	2	3	4	5	6	7	8	9	10				
No.	B.—Towns.	Population according to census of 1901.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and diarrhoea.	Respiratory diseases.	INJURIES.				
									Suicide.		Wounding and accidents.	Snake-bite and killed by wild beasts.	Total.
									Males.	Females.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
LUDHIANA DISTRICT.													
55	Ludhiana ... ..	48,211	2	9	1,486	557	66	256	...	...	4	...	4
56	Jagraon ... ..	18,760	...	17	331	165	20	135	1	1	3	...	5
57	Raikot ... ..	10,131	...	...	317	58	4	30	1	1	6	...	8
58	Khanna ... ..	3,838	...	7	143	47	4	28	...	...	...	...	...
59	Machiwara ... ..	5,588	...	11	158	24	6	15	...	...	...	1	1
FEROZEPUR DISTRICT.													
60	Ferozepore ... ..	23,475	...	7	27	672	28	60	...	...	3	3	6
61	Zira ... ..	4,001	...	12	26	70	12	40	1	...	1	1	3
62	Mokhu ... ..	1,355	...	1	33	49	2	17	...	...	...	...	...
63	Dbarmkot ... ..	6,731	...	3	385	45	6	34	...	...	4	...	4
64	Muktsar ... ..	6,389	...	23	14	101	6	12	...	...	2	...	2
65	Fazilka ... ..	8,505	...	6	2	74	10	19	...	...	...	...	...
MONTGOMERY DISTRICT.													
66	Montgomery ... ..	6,602	...	1	40	43	10	27	1	...	1	...	2
67	Kamalia ... ..	6,976	...	...	66	74	8	7	...	...	...	2	2
68	Pakpattan ... ..	6,192	...	2	4	73	7	10	...	...	2	...	2
LAHORE DISTRICT.													
69	Lahore ... ..	186,884	12	28	1,751	2,728	260	1,576	3	2	86	2	93
70	Sharakpur ... ..	4,474	...	2	10	68	12	5	...	...	1	...	1
71	Chunian ... ..	8,959	...	7	479	85	12	30	...	...	3	1	4
72	Khadian ... ..	3,401	...	6	141	63	4	12	...	...	4	...	4
73	Kasur ... ..	22,022	...	65	533	293	35	72	...	...	10	...	10
74	Khemkarn ... ..	6,083	...	2	358	54	2	9	...	...	1	1	2
75	Patti ... ..	8,187	...	4	22	78	9	17	...	...	4	1	5
AMRITSAR DISTRICT.													
76	Amritsar ... ..	161,039	3	232	1,103	3,843	219	1,314	3	4	64	2	73
77	Majitha ... ..	6,403	...	...	233	101	18	29	...	...	1	...	1
78	Jandiala ... ..	7,750	...	2	129	237	9	28	...	...	...	...	...
79	Tarn Taran ... ..	4,428	...	1	44	89	4	16	...	...	3	...	3
GURDASPUR DISTRICT.													
80	Gurdaspur ... ..	4,903	...	...	29	116	13	31	...	...	4	1	5
81	Diwanagar ... ..	5,191	...	...	180	206	3	30	...	...	2	...	2
82	Kalanour ... ..	5,251	...	23	277	97	11	34	...	...	4	...	4
83	Pathankot ... ..	6,091	...	1	298	94	22	98	...	...	1	1	2
84	Sujanpur ... ..	5,687	...	...	216	77	15	66	...	...	3	...	3
85	Dalhousie ... ..	808	...	...	1	15	2	14	...	...	3	...	3
86	Batala ... ..	27,365	...	11	848	477	57	235	...	...	11	2	13
87	Srigobindpur ... ..	4,380	...	...	99	113	3	11	...	...	2	...	2
88	Dera Nanak ... ..	5,118	...	...	186	84	10	54	...	...	1	...	1
SIALKOT DISTRICT.													
89	Sialkot ... ..	44,789	...	132	512	672	66	366	...	...	11	3	14
90	Daska ... ..	6,655	...	...	191	61	4	46	...	...	5	...	5
91	Janke ... ..	4,216	...	...	85	34	9	12	...	...	3	...	3
92	ia Sobha Singh ... ..	3,338	...	2	60	86	7	28	...	...	...	...	...
93	Basur ... ..	8,335	...	1	308	89	22	72	...	...	1	...	1
94	Zafarwal ... ..	4,658	...	1	160	53	5	53	...	...	...	...	...
95	owal ... ..	4,422	...	...	8	43	4	36	1	...	1	...	2
UJIANWALA DISTRICT.													
96	ujanwala ... ..	28,356	...	...	357	456	18	139	...	...	12	...	12
97	Mazirabad ... ..	18,069	...	1	456	248	28	78	...	...	9	...	9
98	Minabad ... ..	6,494	...	...	91	77	2	55	...	...	3	...	3
99	la Digar Singh ... ..	2,705	...	1	142	49	3	6	...	...	...	...	...
100	Kalgarh ... ..	4,961	...	...	37	37	1	9	...	...	1	1	2
101	Ramnagar ... ..	7,121	...	...	58	90	6	37	...	...	2	...	2
102	ahdara ... ..	5,313	...	10	71	124	2	37	...	...	2	1	3
103	Hafizabad ... ..	4,692	...	1	38	55	2	16	...	...	4	...	4
104	angah Dogran ... ..	5,349	...	...	14	10	...	7	...	...	2	1	3
105	indi Bhattian ... ..	4,229	...	...	87	37	2	14	...	...	3	...	3
106	Sangla ... ..	982	...	...	29	22	3	8	...	...	2	...	2
GUJRAT DISTRICT.													
107	Gujrat ... ..	19,048	...	4	125	262	22	125	...	...	8	1	9
108	alpur ... ..	10,640	...	...	51	130	27	74	...	...	...	...	...
109	Kanjah ... ..	6,431	...	...	3	94	6	58	...	...	2	...	2
110	inga ... ..	5,412	...	1	173	51	3	56	...	...	1	1	2



No. VI—continued.

TOWNS OF THE PUNJAB DURING THE YEAR 1904.

11	12	13										14
RATIO OF DEATHS PER 1,000 OF POPULATION.												
All other causes.	Total deaths from all causes.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diar. rhoea.	Respiratory diseases.	Injuries.	All other causes.	From all causes.		No.
										For the year.	Mean of pre- vious five years.	
15	16	17	18	19	20	21	22	23	24	25	26	27
306	2,686	0.04	0.19	30.82	11.55	1.37	5.31	0.08	6.35	55.71	53.81	55
154	827	...	0.91	17.64	8.80	1.07	7.20	0.27	8.21	44.08	71.43	56
129	546	...	...	31.29	5.73	0.39	2.96	0.79	12.73	53.89	79.01	57
37	266	...	1.82	37.26	12.25	1.04	7.30	...	9.64	69.31	73.32	58
45	260	...	1.97	28.27	4.29	1.07	2.68	0.18	8.05	46.53	70.87	59
166	966	...	0.30	1.15	28.63	1.19	2.56	0.26	7.07	41.15	47.82	60
49	212	...	3.00	6.50	17.50	3.00	10.00	0.75	12.25	52.99	78.58	61
3	105	...	0.74	24.35	36.16	1.48	12.55	...	2.21	77.49	70.70	62
92	569	...	0.45	57.20	6.69	0.89	5.05	0.59	13.67	84.53	49.95	63
54	212	...	3.60	2.19	15.81	0.94	1.88	0.31	8.45	33.18	41.10	64
56	167	...	0.71	0.24	8.70	1.18	2.23	...	6.58	19.64	39.65	65
38	156	...	0.15	6.06	6.51	1.51	4.09	0.30	5.00	23.63	18.81	66
89	246	...	...	9.46	10.61	1.15	1.00	0.29	12.76	35.26	32.53	67
57	155	...	0.32	0.64	11.79	1.13	1.61	0.32	9.21	25.02	30.68	68
1,017	7,465	0.06	0.15	9.37	14.60	1.39	8.43	0.50	5.44	39.94	37.97	69
42	140	...	0.45	2.24	15.20	2.68	1.12	0.22	9.39	31.29	36.08	70
106	723	...	0.78	53.46	9.49	1.34	3.35	0.45	11.83	80.70	71.21	71
36	266	...	1.76	41.46	18.52	1.18	3.53	1.18	10.59	78.21	59.16	72
214	1,222	...	2.95	24.20	13.30	1.59	3.27	0.45	9.72	55.49	53.21	73
56	483	...	0.33	58.84	8.88	0.33	1.48	0.33	9.21	79.40	59.31	74
56	191	...	0.49	2.69	9.53	1.10	2.08	0.61	6.84	23.33	45.39	75
680	7,467	0.02	1.44	6.85	23.86	1.36	8.16	0.45	4.22	46.37	48.09	76
51	433	...	...	36.39	15.77	2.81	4.53	0.16	7.97	67.62	46.48	77
34	439	...	0.26	16.65	30.58	1.16	3.61	...	4.39	56.65	44.21	78
30	187	...	0.23	9.94	20.10	0.90	3.61	0.68	6.78	42.23	40.88	79
28	222	...	...	5.91	23.66	2.65	6.32	1.02	5.71	45.28	56.23	80
28	449	...	...	34.68	39.68	0.58	5.78	0.39	5.39	86.50	60.49	81
30	476	...	4.38	52.75	18.47	2.09	6.47	0.76	5.71	90.65	48.18	82
27	542	...	0.16	48.92	15.43	3.61	16.09	0.33	4.43	88.98	42.00	83
10	387	...	...	37.98	13.54	2.64	11.61	0.53	1.76	68.05	36.43	84
3	38	...	...	1.24	18.56	2.48	17.32	3.71	3.71	47.03	30.20	85
57	1,698	...	0.40	30.99	17.43	2.08	8.59	0.48	2.08	62.05	39.00	86
16	244	...	...	22.59	25.80	0.68	2.51	0.46	3.65	55.71	44.20	87
17	352	...	...	36.36	16.41	1.95	10.55	0.19	3.32	68.78	42.79	88
270	2,032	...	2.95	11.43	15.00	1.47	8.17	0.31	6.03	45.37	44.39	89
44	351	...	...	28.70	9.17	0.60	6.91	0.75	6.61	52.74	48.57	90
35	178	...	...	20.16	8.06	2.13	2.85	0.71	8.30	42.22	67.36	91
21	204	...	0.60	17.97	25.76	2.10	8.39	...	6.29	61.11	62.43	92
73	566	...	0.12	36.95	10.68	2.64	8.64	0.12	8.76	67.91	38.82	93
27	299	...	0.21	34.35	11.38	1.07	11.38	...	5.80	64.19	56.76	94
20	113	...	...	1.81	9.72	0.90	8.14	0.45	4.54	25.55	42.33	95
187	1,169	...	...	12.59	16.08	0.63	4.30	0.42	6.59	41.23	44.60	96
106	926	...	0.06	25.24	13.73	1.55	4.32	0.50	5.87	51.25	45.60	97
44	272	...	...	14.01	11.86	0.31	8.47	0.46	6.78	41.89	49.58	98
23	224	...	0.37	52.50	18.11	1.11	2.22	...	8.50	82.81	53.46	99
27	113	...	...	7.46	7.46	0.20	1.81	0.40	5.44	22.76	47.57	100
58	251	...	...	8.14	12.64	0.84	5.20	0.28	8.14	35.25	55.05	101
55	302	...	1.88	13.36	23.34	0.38	6.96	0.56	10.35	56.84	Not vail- ble.	102
37	153	...	0.21	8.10	11.72	0.43	3.41	0.85	7.88	32.61		103
16	44	...	...	2.62	1.87	...	1.31	0.56	1.87	18.23		104
40	183	...	...	20.57	8.75	0.47	3.31	0.71	9.46	43.27		105
12	76	...	...	29.53	24.40	3.05	8.15	2.03	12.22	77.39		106
98	645	...	0.21	6.56	13.76	1.15	6.56	0.47	5.14	33.86	42.60	107
104	386	...	...	4.79	12.22	2.54	6.95	...	9.77	36.28	40.40	108
13	176	...	...	0.47	14.62	0.93	9.02	0.81	2.02	27.37	30.80	109
5	291	...	0.18	31.97	9.42	0.55	10.35	0.37	0.92	53.77	32.00	110

## DEATHS REGISTERED FROM DIFFERENT CAUSES IN THE

1	2	3	4	5	6	7	8	9	10				
No.	B.—TOWNS.	Population according to censuses of 1901.	Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diarrhoea.	Respiratory diseases.	INJURIES.				
									Suicide.		Wounding and accidents.	Snake-bite and killed by wild beasts.	Total.
									Males.	Females.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14
SHAHPUR DISTRICT.													
111	Shahpur ... ..	5,855	...	...	36	54	10	13	...	...	2	...	2
112	Sahiwal ... ..	9,163	...	...	65	310	12	7	...	...	6	...	6
113	Bhera ... ..	18,680	1	...	1,048	253	59	63	...	...	6	...	8
114	Miani ... ..	7,220	...	...	697	108	11	25	1	...	7	...	8
115	Khushab ... ..	11,403	...	...	51	140	40	35	...	...	5	...	5
JHELUM DISTRICT.													
116	Jhelum ... ..	11,703	...	4	87	113	10	29	...	...	7	1	8
117	Pind Dadan Khan ... ..	13,770	...	...	519	264	62	31	...	...	6	...	6
RAWALPINDI DISTRICT.													
118	Rawalpindi ... ..	47,077	2	1	66	650	127	228	...	...	22	1	23
119	Murree ... ..	1,517	...	...	1	24	3	8	...	...	...	...	...
ATTOCK DISTRICT.													
120	Pindigheb ... ..	8,452	...	...	...	137	12	6	...	...	2	...	2
121	Hazro ... ..	9,799	...	8	...	134	21	46	...	...	4	...	4
MIANWALI DISTRICT.													
122	Leiah ... ..	7,546	...	...	2	93	8	6	...	...	3	1	4
123	Karor ... ..	3,243	...	1	...	71	3	2	...	...	...	...	...
124	Bhakkar ... ..	5,312	...	...	...	114	7	8	...	...	...	...	...
125	Isa Khel ... ..	7,630	...	2	...	151	10	3	...	...	1	...	1
126	Kalabagh ... ..	5,824	...	...	...	132	36	3	...	...	2	...	2
JHANG DISTRICT.													
127	Jhang ... ..	8,783	...	...	36	114	16	11	1	...	...	2	3
128	Maghiana ... ..	14,415	...	1	695	132	27	29	...	...	5	1	6
129	Chinnot ... ..	15,685	...	1	28	182	11	27	...	...	...	...	...
130	Lyallpur ... ..	9,171	...	5	41	78	11	11	...	...	3	...	3
MULTAN DISTRICT.													
131	Multan ... ..	74,627	...	65	7	1,240	160	179	...	1	13	3	17
132	Kahrer ... ..	5,552	...	4	...	99	10	4	...	...	...	...	...
133	Shujabad ... ..	5,880	...	...	...	135	8	7	...	...	5	1	6
134	Jalalpur ... ..	5,149	...	1	3	112	11	3	...	...	3	...	3
135	Talamba ... ..	2,526	...	...	67	48	5	4	...	...	1	1	2
136	Duniapur ... ..	2,150	...	1	...	49	3	...	...	...	...	...	...
MUZAFFARGARH DISTRICT.													
137	Muzaffargarh ... ..	3,737	...	2	...	50	16	18	...	...	4	...	4
138	Khangarh ... ..	3,621	...	...	...	76	7	21	...	...	...	...	...
139	Alipur ... ..	2,788	...	...	...	43	1	10	...	...	...	...	...
140	Khairpur ... ..	2,257	...	3	...	52	1	2	...	...	...	...	...
DERA GHAZI KHAN.													
141	Dera Ghazi Khan ... ..	21,697	...	1	52	264	29	54	...	...	8	...	8
142	Jampur ... ..	5,928	...	...	...	119	11	6	...	...	1	1	2
143	Dajal ... ..	6,213	...	1	...	92	12	14	...	...	1	...	1
144	Rajapur ... ..	3,917	...	...	...	64	9	8	...	...	...	...	...
145	Kot Mithan ... ..	3,487	...	...	...	35	5	...	...	...	3	...	3
Total		2,014,526	88	1,837	28,377	33,155	3,648	11,181	16	15	617	76	724
Total for the Province		20,108,690	716	9,624	396,357	378,405	12,115	53,520	149	179	4,874	1,270	6,472



## No. VI—concluded.

TOWNS OF THE PUNJAB DURING THE YEAR 1904.

11	12	13										14
All other causes.	Total deaths from all causes.	RATIO OF DEATHS PER 1,000 OF POPULATION.										Number.
		Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and diar- rhoea.	Respiratory diseases.	Injuries.	All other causes.	From all causes.		
										For the year.	Mean of pre- vious five years.	
15	16	17	18	19	20	21	22	23	24	25	26	27
31	146	...	..	6.15	9.22	1.71	2.22	0.34	5.29	24.94	27.63	111
136	536	...	...	7.09	33.83	1.31	0.76	0.65	14.84	58.50	39.03	112
188	1,620	0.05	...	56.10	13.54	3.16	3.37	0.43	10.06	86.72	33.95	113
48	900	...	...	96.54	14.96	1.52	3.88	1.11	6.65	124.65	42.85	114
104	375	...	...	4.47	12.28	3.51	3.07	0.44	9.12	32.89	26.29	115
63	314	...	0.34	7.43	9.66	0.85	2.48	0.68	5.38	26.83	28.05	116
88	970	...	...	37.69	19.17	4.50	2.25	0.44	6.39	70.44	46.07	117
377	1,474	0.04	0.02	1.40	13.81	2.70	4.84	0.49	8.01	31.31	38.26	118
12	48	...	...	0.66	15.82	1.98	5.27	...	7.91	31.64	36.26	119
60	217	...	...	...	16.21	1.42	0.71	0.24	7.10	25.67	31.06	120
85	298	...	0.82	...	13.67	2.14	4.69	0.41	8.67	30.41	32.99	121
36	149	...	...	0.27	12.32	1.06	0.80	0.53	4.77	19.75	18.10	122
32	109	...	0.31	...	21.89	0.93	0.62	...	9.87	33.61	33.49	123
32	161	...	...	...	21.46	1.32	1.51	...	6.02	30.31	27.75	124
27	194	...	0.26	...	19.79	1.31	0.39	0.13	3.54	25.43	25.69	125
24	197	...	...	...	22.66	6.18	0.52	0.34	4.12	33.83	41.62	126
150	330	...	...	4.10	12.98	1.82	1.25	0.34	17.08	37.57	36.00	127
193	1,083	...	0.07	48.21	9.16	1.87	2.01	0.42	13.39	75.13	34.80	128
211	460	...	0.06	1.79	11.60	0.70	1.72	...	13.45	29.33	44.97	129
37	186	...	0.55	4.47	8.51	1.20	1.20	0.33	4.03	20.28	Not available.	130
453	2,121	...	0.87	0.09	16.62	2.14	2.40	0.23	6.07	28.42	30.06	131
61	178	...	0.72	...	17.83	1.80	0.72	...	10.99	32.06	31.05	132
28	184	...	...	...	22.96	1.36	1.19	1.02	4.76	31.29	32.79	133
53	186	...	0.19	0.58	21.75	2.14	0.58	0.58	10.29	36.12	31.00	134
47	173	...	...	26.52	19.00	1.98	1.58	0.79	18.61	68.49	37.29	135
26	79	...	0.47	...	22.79	1.40	...	...	12.09	36.74	35.26	136
34	124	...	0.54	...	13.38	4.28	4.82	1.07	9.10	33.18	35.54	137
42	146	...	...	...	20.99	1.93	5.80	...	11.60	40.32	40.98	138
37	91	...	...	...	15.42	0.36	3.59	...	13.27	32.64	41.18	139
25	83	...	1.33	...	23.04	0.44	0.89	...	11.08	36.77	37.75	140
145	551	...	0.05	2.40	12.17	1.34	2.49	0.37	6.59	25.40	27.57	141
30	168	...	...	...	20.07	1.86	1.01	0.34	5.06	28.34	30.60	142
40	160	...	0.16	...	14.80	1.93	2.25	0.16	6.44	25.75	31.48	143
9	90	...	...	...	16.34	2.30	2.04	...	2.30	22.98	29.21	144
15	58	...	...	...	10.04	1.43	...	0.86	4.30	16.63	20.65	145
15,142	94,152	0.04	0.91	14.09	16.46	1.81	5.55	0.36	7.52	46.74	44.26	
129,249	986,458	0.04	0.48	19.71	18.82	0.60	2.66	0.32	6.43	49.06	40.67	

ANNUAL FORM No. VII.

DEATHS REGISTERED FROM CHOLERA IN THE DISTRICTS OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1904.

1	2	3	4	5														6			7			8	9
Number.	DISTRICTS.	CIRCLES OF REGISTRATION.		TOWNS AND VILLAGES.		MONTHS.												TOTAL.			RATIO OF DEATHS PER 1,000 OF POPULATION.			Mean ratio per 1,000 for previous five years.	
		Number in each district.	Number from which deaths from cholera were reported.	Number in each district.	Number from which deaths from cholera were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	Mean ratio per 1,000 for previous five years.	Number.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
DELHI DIVISION.																									
1	Hissar ...	27	2	972	8	...	...	...	...	...	228	...	...	...	...	...	...	115	113	228	0.28	0.31	0.29	1.81	1
2	Rohtak ...	15	3	502	3	...	...	...	...	69	...	...	...	...	...	...	...	33	36	69	0.10	0.12	0.11	0.68	2
3	Gurgaon ...	21	...	1,179	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.39	3
4	Delhi ...	17	1	718	1	...	...	...	...	...	2	...	...	...	...	...	...	1	1	2	0.003	0.003	0.003	0.21	4
5	Karnal ...	26	4	1,390	5	...	...	...	...	33	21	13	...	...	...	...	...	33	34	67	0.07	0.08	0.08	0.62	5
6	Ambala ...	19	4	1,725	4	1	...	...	1	2	2	...	...	...	...	...	...	4	2	6	0.01	0.01	0.01	0.54	6
7	Simla ...	3	...	51	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.23	7
JULLUNDUR DIVISION.																									
8	Kangra ...	18	3	718	8	...	...	...	...	...	...	3	38	5	...	...	...	27	19	46	0.07	0.05	0.06	0.03	8
9	Hoshiarpnr ...	24	9	2,128	35	...	...	...	...	...	1	11	101	22	...	...	...	81	54	135	0.15	0.12	0.14	0.09	9
10	Jullundur ...	19	9	1,226	22	...	...	...	...	...	3	58	40	...	...	...	...	67	34	101	0.14	0.08	0.11	0.19	10
11	Ludhiana ...	15	3	869	3	...	...	...	...	...	4	2	...	...	...	...	...	3	3	6	0.01	0.01	0.01	0.75	11
12	Ferozepore ...	25	1	1,511	1	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	0.002	...	0.001	1.19	12
LAHORE DIVISION.																									
13	Montgomery ...	20	2	1,374	2	...	...	...	...	...	1	1	...	...	...	...	...	1	1	2	0.004	0.004	0.004	0.28	13
14	Lahore ...	30	2	1,540	2	...	...	...	1	1	6	3	2	...	...	...	...	6	7	13	0.01	0.01	0.01	1.00	14
15	Amritsar ...	15	2	1,047	2	...	...	...	...	...	...	13	1	...	...	...	...	7	7	14	0.01	0.01	0.01	0.30	15
16	Gurdaspur ...	25	3	2,255	3	1	...	...	...	...	6	2	...	...	...	...	...	6	3	9	0.01	0.01	0.01	0.13	16
17	Sialkot ...	22	1	2,355	1	...	...	...	...	...	5	...	...	...	...	...	...	3	2	5	0.01	0.003	0.004	0.18	17
18	Gujranwala ...	23	...	1,339	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.17	18
RAWALPINDI DIVISION.																									
19	Gujrat ...	14	...	1,340	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.09	19
20	Shahpur ...	22	3	794	3	...	...	1	...	...	1	1	...	...	...	...	...	3	...	3	0.01	...	0.01	0.58	20
21	Jhelam ...	14	...	876	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.21	21
22	Rawalpindi ...	13	1	1,195	1	...	...	...	...	2	...	...	...	...	...	...	...	2	...	2	0.01	...	0.003	0.18	22
23	Attock ...	13	...	621	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.31	23
MULTAN DIVISION.																									
24	Mianwali ...	19	...	431	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.09	24
25	Jhang ...	28	2	1,899	3	...	...	...	...	...	...	6	...	1	...	...	...	3	4	7	0.01	0.01	0.01	0.20	25
26	Multan ...	22	...	1,357	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.11	26
27	Muzaffargarh ...	18	...	704	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.01	27
28	D. G. Khan ...	22	...	718	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.34	28
Total for the Province.		549	55	32,834	107	2	...	1	2	107	280	114	182	28	...	...	...	396	320	716	0.04	0.03	0.04	0.42	



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ANNUAL FORM No. VIII.

DEATHS REGISTERED FROM SMALL-POX IN THE DISTRICTS OF THE  
PUNJAB DURING EACH MONTH OF THE YEAR 1904.

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## ANNUAL FORM

## DEATHS REGISTERED FROM SMALL-POX IN THE DISTRICTS

1	2	3		4		5						
Number.	DISTRICTS.	CIRCLES OF REGISTRATION.		TOWNS AND VILLAGES.		MONTHS.						
		Number in each district.	Number from which deaths from small-pox were reported.	Number in each district.	Number from which deaths from small-pox were reported.	January.	February.	March.	April.	May.	June.	July.
1	2	3	4	5	6	7	8	9	10	11	12	13
	DELHI DIVISION.											
1	Hissar ... ..	27	12	972	37	51	104	181	239	251	149	62
2	Rohtak ... ..	15	15	502	25	67	51	82	61	56	31	28
3	Gurgaon ... ..	21	21	1,179	273	137	183	274	329	379	265	117
4	Delhi ... ..	17	13	718	23	8	24	20	36	45	16	7
5	Karnal ... ..	26	24	1,390	159	38	31	50	38	107	119	69
6	Ambala ... ..	19	18	1,725	378	36	49	93	177	178	132	85
7	Simla ... ..	3	1	51	2	2	..	...	...	...	...	...
	JULLUNDUR DIVISION.											
8	Kangra ... ..	18	7	718	8	1	1	1	1	4	1	1
9	Hoshiarpur ... ..	24	14	2,128	31	6	3	3	7	1	6	3
10	Jullundur ... ..	19	13	1,226	62	12	14	6	6	9	13	4
11	Ludhiana ... ..	15	14	869	115	39	45	28	29	33	31	20
12	Ferozepore... ..	25	25	1,511	249	140	112	145	127	103	116	91
	LAHORE DIVISION.											
13	Montgomery ... ..	20	20	1,374	114	29	22	23	18	27	14	28
14	Lahore ... ..	30	30	1,540	275	119	66	75	42	84	68	42
15	Amritsar ... ..	15	14	1,047	84	120	44	27	29	27	28	22
16	Gurdaspur ... ..	25	13	2,255	29	38	19	17	11	7	9	9
17	Sialkot ... ..	22	19	2,355	375	112	54	47	11	41	52	53
18	Gujranwala ... ..	23	10	1,339	12	10	1	6	5	4	4	3
	RAWALPINDI DIVISION.											
19	Gujrat ... ..	14	11	1,340	107	81	45	45	17	10	15	12
20	Shahpur ... ..	22	12	794	24	6	1	6	5	10	8	1
21	Jhelum ... ..	14	7	876	30	48	20	24	16	7	2	2
22	Rawalpindi ... ..	13	11	1,195	50	21	10	6	12	15	7	5
23	Attock ... ..	13	8	621	121	235	62	54	27	27	28	26
	MULTAN DIVISION.											
24	Mianwali ... ..	19	8	431	22	9	5	9	12	4	1	2
25	Jhang ... ..	28	27	1,899	124	28	20	19	16	30	34	12
26	Multan ... ..	22	17	1,357	71	9	1	5	11	22	43	17
27	Muzaffargarh ... ..	18	13	704	38	8	8	4	3	10	4	7
28	Dera Ghazi Khan ... ..	22	10	718	14	2	...	1	...	2	3	2
	Total for the Province ...	540	457	22,221	2,852	1,412	995	1,251	1,285	1,493	1,199	730



xxi

No. VIII.

OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1904.

					6			7		8			9	10
					TOTAL.			NUMBER OF DEATHS AMONG CHILDREN.		RATIO OF DEATHS PER 1,000 OF POPULATION.			Mean ratio per 1,000 for previous five years.	Number
August.	September.	October.	November.	December.	Males.	Females.	Total.	Under one year.	Over one year and under ten years.	Males.	Females.	Total.		
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
19	8	6	16	16	569	533	1,102	259	99	1·35	1·47	1·41	0·45	1
12	3	5	1	4	211	190	401	123	29	0·63	0·64	0·64	0·14	2
24	25	7	9	8	901	856	1,757	426	145	2·31	2·41	2·35	0·85	3
4	4	...	1	...	83	82	165	47	38	0·22	0·26	0·24	0·15	4
18	16	10	3	2	287	214	501	144	88	0·60	0·53	0·57	0·19	5
38	35	43	19	11	477	419	896	197	151	1·14	1·22	1·17	0·31	6
...	...	...	...	...	1	1	2	...	1	0·04	0·08	0·06	0·54	7
...	...	...	...	...	8	2	10	...	9	0·02	0·01	0·01	0·02	8
...	...	...	1	18	26	22	48	23	10	0·05	0·05	0·05	0·26	9
3	2	...	6	8	44	39	83	27	21	0·09	0·09	0·09	0·37	10
7	12	15	7	15	150	131	281	80	55	0·41	0·43	0·42	0·27	11
53	31	26	55	44	519	524	1,043	248	246	1·02	1·23	1·12	0·54	12
18	8	9	21	15	115	117	232	63	54	0·43	0·51	0·47	1·21	13
32	13	11	23	46	323	298	621	142	149	0·52	0·58	0·54	0·64	14
16	4	10	16	34	200	177	377	103	68	0·36	0·38	0·37	0·33	15
2	1	1	...	1	59	56	115	31	35	0·12	0·13	0·12	0·19	16
19	11	12	42	38	276	216	492	164	87	0·49	0·43	0·46	0·43	17
1	2	...	...	3	21	18	39	8	2	0·04	0·04	0·04	0·17	18
8	2	...	4	9	120	128	248	94	38	0·31	0·35	0·33	0·45	19
1	...	...	...	...	21	17	38	13	3	0·08	0·07	0·07	0·77	20
2	1	...	1	3	66	60	126	43	29	0·26	0·24	0·25	0·59	21
1	3	...	5	2	36	51	87	20	25	0·13	0·21	0·17	0·65	22
16	6	6	2	7	263	233	496	141	36	1·10	1·05	1·08	1·05	23
...	...	...	...	...	25	17	42	14	12	0·11	0·08	0·10	0·47	24
18	12	...	2	8	107	92	199	74	32	0·19	0·21	0·20	0·65	25
17	8	7	6	5	73	78	151	35	39	0·19	0·25	0·22	0·56	26
5	4	2	...	3	28	30	58	8	18	0·13	0·16	0·14	0·90	27
3	...	1	...	...	9	5	14	2	5	0·04	0·02	0·03	0·45	28
237	21	171	240	300	5,018	4,303	9,621	2,526	1,512	0·46	0·40	0·43	0·40	

## ANNUAL FORM

## DEATHS REGISTERED FROM FEVERS IN THE DISTRICTS

1	2	3		4		5					
Number.	DISTRICTS.	CIRCLES OF REGISTRATION.		TOWNS AND VILLAGES.		MONTHS.					
		Number in each district.	Number from which deaths from fevers were reported.	Number in each district.	Number from which deaths from fevers were reported.	January.	February.	March.	April.	May.	June.
1		3	4	5	6	7	8	9	10	11	12
DELHI DIVISION.											
1	Hissar .. .. .	27	27	972	919	1,578	1,457	1,553	1,258	1,435	1,247
2	Rohtak ... ..	15	15	502	502	1,215	830	1,048	898	1,010	962
3	Gurgaon ... ..	21	21	1,179	1,179	1,144	1,050	998	1,089	1,277	1,131
4	Delhi ... ..	17	17	718	718	1,255	1,074	1,146	1,131	1,379	1,132
5	Karnal ... ..	26	26	1,390	1,233	2,166	1,669	1,581	1,502	2,114	1,847
6	Ambala ... ..	19	19	1,725	1,692	1,855	1,360	1,181	1,032	1,090	1,068
7	Simla ... ..	3	3	51	51	20	12	14	15	16	21
JULLUNDUR DIVISION.											
8	Kangra ... ..	18	18	718	694	1,185	1,012	1,033	899	1,418	1,262
9	Hoshiarpur ... ..	24	24	2,128	1,768	1,436	1,184	1,323	1,458	1,373	1,182
10	Jullundur ... ..	19	19	1,226	1,170	993	867	1,051	1,043	1,440	1,020
11	Ludhiana ... ..	15	15	869	807	1,068	656	567	475	595	650
12	Ferozepore ... ..	25	25	1,511	952	2,163	1,679	1,972	1,599	1,578	1,257
LAHORE DIVISION.											
13	Montgomery ... ..	20	20	1,374	964	840	544	409	484	569	491
14	Lahore ... ..	30	30	1,540	1,497	1,946	1,366	1,485	1,602	1,685	1,495
15	Amritsar ... ..	15	15	1,047	1,017	2,179	1,742	1,794	1,968	2,337	1,776
16	Gurdaspur ... ..	25	25	2,255	2,239	2,871	2,095	1,951	1,658	1,760	1,275
17	Sialkot ... ..	22	22	2,355	2,177	2,524	2,411	3,417	3,743	2,513	2,021
18	Gujranwala ... ..	23	23	1,339	1,339	1,707	1,361	1,364	902	1,145	1,385
RAWALPINDI DIVISION.											
19	Gujrat ... ..	14	14	1,340	1,269	1,191	909	852	841	719	740
20	Shahpur ... ..	22	22	794	794	1,668	920	763	447	555	664
21	Jhelum ... ..	14	14	876	825	1,357	842	649	564	576	536
22	Rawalpindi ... ..	13	13	1,195	1,195	1,393	900	733	665	790	754
23	Attock ... ..	13	13	621	528	1,402	853	696	624	737	725
MULTAN DIVISION.											
24	Mianwali ... ..	19	19	431	395	1,231	846	763	655	860	722
25	Jhang ... ..	28	28	1,899	1,872	2,433	1,576	1,277	1,230	1,728	1,532
26	Multan ... ..	22	22	1,357	1,255	1,779	1,280	1,026	1,019	1,368	1,119
27	Muzaffargarh ... ..	18	18	704	623	1,274	926	781	599	920	712
28	Dera Ghazi Khan ... ..	22	22	718	522	1,054	792	845	575	649	797
Total for the Province ...		549	549	32,834	30,196	42,927	32,213	32,272	30,605	33,636	29,523



No. IX.

OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1904.

						6			7			8	9
						TOTAL.			RATIO OF DEATHS PER 1000 OF POPULATION.			Mean ratio per 1,000 for pre- vious five years,	Number.
July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males	Females.	Total.		
13	14	15	16	17	18	19	20	21	22	23	24	25	26
943	845	1,343	1,671	1,459	1,409	8,342	7,856	16,198	19·95	21·61	20·72	36·73	1
840	870	1,163	1,513	1,475	1,130	6,652	6,302	12,954	19·96	21·19	20·54	33·10	2
819	954	2,101	3,202	2,500	1,988	9,164	9,089	18,253	23·47	25·55	24·46	25·52	3
842	934	1,224	1,649	1,759	1,714	7,705	7,564	15,269	20·82	23·87	22·2 3	27·58	4
1,297	1,133	1,798	2,333	1,890	1,724	11,122	9,932	21,054	23·22	24·57	23·84	36·50	5
745	763	1,319	1,741	1,408	1,402	7,499	7,465	14,964	17·87	21·73	19·61	29·20	6
15	10	26	21	15	10	105	90	195	4·56	7·16	5·48	8·80	7
980	1,073	1,511	1,310	867	1,197	6,929	6,818	13,747	17·48	18·53	17·98	22·86	8
1,010	979	1,276	1,354	1,255	1,249	7,318	7,761	15,079	13·92	16·73	15·23	19·68	9
804	863	936	958	1,104	983	6,012	6,650	12,662	12·31	15·99	14·00	20·01	10
540	516	662	795	825	594	3,961	3,982	7,943	10·73	13·10	11·80	26·05	11
1,098	811	888	1,258	1,446	1,557	8,932	8,374	17,306	17·61	19·71	18·56	35·15	12
410	339	334	429	569	559	3,053	2,924	5,977	11·37	12·76	12·01	15 96	13
1,140	1,082	1,017	1,241	1,509	1,621	8,693	8,496	17,189	13·81	16·44	15·00	25·08	14
1,333	1,225	1,356	1,801	1,932	1,864	10,509	10,798	21,307	18·80	23·29	20·84	26·59	15
1,154	1,051	1,497	1,693	1,481	1,461	9 781	10,166	19,947	19·27	23·68	21·29	23·35	16
1,339	1,233	1,434	1,503	1,430	1,256	11,834	12,990	24,824	20·94	25·66	23·17	25·00	17
830	988	790	803	1,227	1,006	6,911	6,597	13,508	14 24	16 28	15·17	23·94	18
768	749	894	1,020	1,210	1,177	5,360	5,710	11,070	13·76	15·81	14·75	20·10	19
580	441	441	497	809	954	4,445	4,294	8,739	16·27	17·16	16·67	17·85	20
485	575	585	858	946	955	4,455	4,473	8,928	17·77	18·08	17·92	22·30	21
674	710	983	1,420	1,417	1,233	5,907	5,765	11,672	21·81	23·35	22·54	22·15	22
673	642	662	1,028	1,180	1,140	5,275	5,087	10,362	21·98	23·02	22·48	20·34	23
590	449	534	671	875	1,019	4,721	4,494	9,215	21·07	22·40	21·70	22·29	24
1,109	857	931	1,174	1,510	1,727	8,927	8,157	17,084	15·96	18·40	17·04	19·06	25
854	821	886	1,208	1,444	1,373	7,398	6,779	14,177	19·48	21·33	20·31	18·93	26
583	467	606	995	1,045	960	5,224	4,644	9,868	23·72	25·04	24·33	23·20	27
462	424	721	755	847	993	4,808	4,106	8,914	18·82	19·14	18·97	18·80	28
22,917	21,804	27,918	34,901	35,434	34,255	191,042	187,363	378,405	17·69	20·12	18·82	24·77	

DEATHS REGISTERED FROM DYSENTERY AND DIARRHŒA IN THE DISTRICTS

1	2	3		4		5					
Number.	DISTRICTS.	CIRCLES OF RE- GISTRATION.		TOWNS AND VILLAGES.		MONTHS.					
		Number in each dis- trict.	Number from which deaths from dysen- tery and diarrhoea were reported.	Number in each dis- trict.	Number from which deaths from dysen- tery and diarrhoea were reported.	January.	February.	March.	April.	May.	June.
1	2	3	4	5	6	7	8	9	10	11	12
	DELHI DIVISION.										
1	Hissar ... ..	27	20	972	51	15	19	22	25	25	23
2	Rohtak ... ..	15	15	502	113	10	5	6	11	14	24
3	Gurgaon ... ..	21	21	1,179	180	39	20	38	71	70	47
4	Delhi ... ..	17	17	718	101	34	20	41	46	50	43
5	Karnal ... ..	26	26	1,390	141	31	36	18	32	35	25
6	Ambala ... ..	19	19	1,725	487	93	95	68	100	96	91
7	Simla ... ..	3	3	51	28	2	3	5	1	2	4
	JULLUNDUR DIVISION.										
8	Kangra ... ..	18	18	718	433	59	37	42	44	92	92
9	Hoshiarpur ... ..	24	24	2,128	300	36	30	29	75	82	50
10	Jullundur ... ..	19	19	1,226	221	33	28	21	49	73	74
11	Ludhiana ... ..	15	15	869	103	20	11	32	31	24	21
12	Ferozepore ... ..	25	25	1,511	197	16	27	23	27	33	32
	LAHORE DIVISION.										
13	Montgomery ... ..	20	20	1,374	79	15	13	9	14	15	12
14	Lahore ... ..	30	29	1,540	158	37	25	29	60	92	63
15	Amritsar ... ..	15	15	1,047	251	58	29	35	47	86	72
16	Gurdaspur ... ..	25	25	2,255	628	30	24	25	45	89	64
17	Sialkot ... ..	22	22	2,355	364	44	21	19	26	45	53
18	Gujranwala ... ..	23	22	1,339	86	14	11	9	18	18	21
	RAWALPINDI DIVISION.										
19	Gujrat ... ..	14	14	1,340	93	15	10	9	21	24	26
20	Shahpur ... ..	22	21	794	302	23	24	37	33	32	40
21	Jhelum ... ..	14	14	876	143	21	16	27	33	34	23
22	Rawalpindi ... ..	13	13	1,195	270	54	62	42	44	48	51
23	Attock ... ..	13	13	621	45	15	10	9	9	17	14
	MULTAN DIVISION.										
24	Mianwali ... ..	19	19	431	94	32	20	20	23	38	8
25	Jhang ... ..	28	28	1,899	614	105	77	29	51	63	79
26	Multan ... ..	22	15	1,357	37	26	21	14	22	33	11
27	Muzaffargarh ... ..	18	18	704	77	11	4	4	2	11	6
28	Dera Ghazi Khan ... ..	22	16	718	102	8	4	13	8	8	12
	Total for the Province ...	549	526	32,834	5,698	896	702	675	968	1,249	1,091



No. X.

OF THE PUNJAB DURING EACH MONTH OF THE YEAR 1904.

						6			7			8	9
						TOTAL.			RATIO OF DEATHS PER 1,000 OF POPULATION.			Mean ratio per 1,000 for previous five years.	Number.
July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.		
13	14	15	16	17	18	19	20	21	22	23	24	25	26
20	37	33	46	32	21	188	130	318	0·45	0·36	0·41	1·26	1
16	28	23	38	30	31	131	105	236	0·39	0·35	0·37	0·60	2
50	60	115	152	138	120	489	431	920	1·25	1·21	1·23	1·46	3
51	69	74	78	75	66	338	309	647	0·91	0·98	0·94	1·54	4
22	29	33	67	46	38	252	160	412	0·53	0·40	0·47	0·96	5
58	65	103	147	144	102	691	471	1,162	1·65	1·37	1·52	1·69	6
6	9	2	9	3	1	29	18	47	1·26	1·43	1·32	1·75	7
48	48	71	46	39	46	362	302	664	0·91	0·82	0·87	1·10	8
46	45	51	50	50	34	334	244	578	0·64	0·53	0·58	0·93	9
50	43	60	54	68	25	297	281	578	0·61	0·68	0·64	0·73	10
14	16	21	11	20	10	125	106	231	0·34	0·35	0·34	1·00	11
26	23	35	36	37	27	216	126	342	0·43	0·30	0·37	0·73	12
4	13	9	15	9	17	97	48	145	0·36	0·21	0·29	0·43	13
38	37	31	50	37	43	316	226	542	0·50	0·44	0·47	0·70	14
59	37	59	67	72	69	404	286	690	0·72	0·62	0·67	0·92	15
71	48	77	102	63	60	367	331	698	0·72	0·77	0·75	1·49	16
49	36	67	59	63	45	301	226	527	0·53	0·45	0·49	0·88	17
12	15	12	19	13	10	90	82	172	0·19	0·20	0·19	0·24	18
20	26	18	37	28	16	127	123	250	0·33	0·34	0·33	0·52	19
24	25	25	29	21	41	204	150	354	0·75	0·60	0·68	0·65	20
58	11	26	34	31	30	196	148	344	0·78	0·60	0·69	0·67	21
45	44	58	51	68	62	354	275	629	1·31	1·11	1·21	0·55	22
13	21	12	21	19	13	103	70	173	0·43	0·32	0·38	0·27	23
11	11	23	17	18	10	138	93	231	0·62	0·46	0·54	0·49	24
54	34	56	33	39	107	446	281	727	0·80	0·63	0·73	0·48	25
20	26	25	28	20	22	142	126	268	0·37	0·40	0·38	0·45	26
8	11	10	10	14	11	59	43	102	0·27	0·23	0·25	0·26	27
6	6	12	17	14	20	79	49	128	0·31	0·23	0·27	0·28	28
899	873	1,141	1,323	1,211	1,097	6,875	5,240	12,115	0·64	0·56	0·60	0·83	





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PLAGUE STATEMENTS Nos. I TO IV.

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## STATEMENT

## STATEMENT SHOWING THE NUMBER OF PLAGUE CASES AND DEATHS

Serial No.	DISTRICTS.	JANUARY.		FEBRUARY.		MARCH.		APRIL.		MAY.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1	Hissar ... ..	155	131	196	150	459	383	722	573	276	258
2	Rohtak ... ..	144	126	423	357	1,050	842	1,553	1,355	407	352
3	Gurgaon ... ..	316	251	102	80	290	241	582	518	329	334
4	Delhi ... ..	...	...	110	61	393	251	267	198	64	60
5	Karnal ... ..	230	146	181	146	259	175	827	506	922	618
6	Ambala ... ..	1,920	1,332	2,353	2,417	5,662	5,027	8,263	6,656	2,510	2,385
7	Simla ... ..	...	...	...	...	...	...	...	...	...	...
8	Kangra ... ..	...	...	...	...	4	2	11	7	2	2
9	Hoshiarpur ... ..	846	697	1,747	1,279	4,825	4,007	8,387	10,873	9,278	7,296
10	Jullundur ... ..	1,040	651	1,544	1,088	6,723	4,035	22,852	14,959	12,669	8,999
11	Ludhiana ... ..	5,017	4,786	7,084	6,375	13,921	11,301	11,946	8,711	3,198	2,168
12	Ferozepore ... ..	523	338	805	537	2,808	1,819	5,955	4,048	3,224	2,284
13	Sialkot ... ..	2,006	1,338	2,120	1,429	5,944	4,227	11,876	9,637	6,982	5,979
14	Gujranwala ... ..	294	241	788	772	1,743	1,642	7,626	7,431	12,784	12,736
15	Montgomery ... ..	...	...	8	1	12	3	478	145	383	161
16	Lahore ... ..	159	130	611	546	2,891	2,759	10,292	10,172	10,680	10,612
17	Amritsar ... ..	384	204	816	769	2,633	2,429	7,228	6,854	8,293	8,206
18	Gurdaspur ... ..	1,243	1,026	3,034	2,562	7,257	7,257	21,720	17,027	9,789	9,393
19	Gujrat ... ..	390	240	955	662	3,544	3,256	11,371	9,698	12,553	11,537
20	Shahpur ... ..	238	530	806	1,353	5,216	6,287	21,126	17,012	15,616	10,448
21	Jhelum ... ..	45	32	38	20	1,245	713	5,283	4,187	6,049	5,411
22	Rawalpindi ... ..	95	93	99	87	42	40	180	141	210	159
23	Attock ... ..	10	10	...	...	...	...	6	2	11	11
24	Mianwali ... ..	...	...	...	...	...	...	1	1	...	...
25	Multan ... ..	...	...	...	...	5	4	63	34	71	72
26	Jhang ... ..	20	16	30	21	234	158	1,056	829	841	713
27	D. G. Khan ... ..	...	...	...	...	...	...	4	1	...	...
28	Muzaffargarh ... ..	...	...	...	...	...	...	...	...	...	...
29	Lyallpur ... ..	46	37	42	22	409	239	1,006	672	712	512
Total ...		15,121	12,355	23,892	20,734	67,479	57,097	160,684	132,247	117,853	100,706
NATIVE STATES.											
1	Patiana ... ..	...	...	...	...	...	...	...	...	...	...
2	Kapurthala ... ..	...	...	...	...	...	...	...	...	...	...
3	Malerkotla ... ..	...	...	...	...	...	...	...	...	...	...
4	Jhind ... ..	...	...	...	...	...	...	...	...	...	...
5	Kaisia ... ..	...	...	...	...	...	...	...	...	...	...
6	Faridkot ... ..	...	...	...	...	...	...	...	...	...	...
7	Nabha ... ..	...	...	...	...	...	...	...	...	...	...
8	Dujana ... ..	...	...	...	...	...	...	...	...	...	...
Total ...		...	...	...	...	...	...	...	...	...	...
GRAND TOTAL ...		...	...	...	...	...	...	...	...	...	...

In British Districts ...	{	Among uninoculated ...	Cases.
		„ inoculated ...	432,739
	}	Total ...	2,366
			435,105



No. I.

MONTHLY, BY DISTRICTS, IN THE PUNJAB FROM 1st JANUARY TO 31st DECEMBER 1904.

JUNE.		JULY.		AUGUST.		SEPTEMBER.		OCTOBER.		NOVEMBER.		DECEMBER.		TOTAL.	
Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
35	31	1	1	22	15	54	40	205	168	537	449	918	831	3,580	3,030
13	12	..	...	11	8	26	18	167	123	592	473	893	830	5,189	4,496
40	40	...	...	2	2	132	56	612	517	1,506	1,364	3,991	3,767	7,902	7,170
1	1	...	.	15	11	39	35	68	46	51	40	306	263	1,314	966
222	162	20	11	11	5	15	9	84	54	217	172	363	331	3,351	2,335
326	276	29	25	56	46	98	55	328	266	506	514	1,504	1,263	23,555	20,262
...	...	...	...	...	...	...	..	...	...	7	3	...	...	7	3
1	1	...	...	...	...	...	...	...	...	5	3	2	...	25	15
3,714	883	31	28	14	31	57	123	281	378	608	831	1,531	1,914	31,319	28,340
794	737	23	28	4	6	45	29	127	81	753	448	1,445	947	48,022	32,008
96	72	1	1	...	...	2	2	64	44	257	213	354	284	41,940	33,957
302	263	406	350	...	...	...	...	...	...	256	118	586	359	14,865	10,116
666	615	29	29	8	6	1	1	42	35	50	50	112	107	29,836	23,453
3,604	3,595	288	287	...	...	35	19	42	39	197	187	657	644	28,058	27,593
99	50	1	...	...	...	...	...	...	...	33	19	56	24	1,070	403
1,145	1,085	56	49	20	19	34	34	26	14	116	79	293	235	26,233	25,734
2,165	1,163	34	34	1	1	9	7	209	183	950	889	1,958	1,699	24,680	22,438
1,054	1,065	42	36	19	15	39	27	189	151	476	389	1,188	985	46,050	39,933
3,729	3,775	169	169	...	...	...	...	95	85	180	183	240	225	33,232	29,830
2,294	1,506	138	106	6	1	1	1	13	..	4	3	52	31	45,510	37,278
755	638	25	20	10	5	5	3	1	2	1	1	52	34	13,509	11,066
91	59	13	9	..	...	34	21	82	36	119	94	86	35	1,051	774
...	...	...	...	...	...	...	...	...	...	...	...	...	...	27	23
...	...	...	...	...	...	...	..	...	...	...	...	3	2	4	3
2	2	...	...	...	...	...	...	...	...	...	...	...	...	141	112
71	64	6	5	...	...	...	...	...	...	4	4	19	9	2,281	1,819
...	...	...	...	...	...	...	...	...	...	1	...	71	52	76	53
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	22	...	...	...	...	...	...	...	...	...	...	36	26	2,278	1,530
21,246	16,117	1,312	1,188	199	171	626	480	2,635	2,222	7,342	6,526	16,716	14,897	435,105	364,740
...	...	...	...	...	...	...	...	...	...	...	...	...	...	23,522	21,098
...	..	...	...	...	...	...	...	...	...	...	...	...	...	9,713	6,691
...	...	...	..	...	...	...	...	...	...	...	...	...	...	5,004	4,246
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,720	2,038
...	...	...	...	...	...	..	...	...	...	...	...	..	...	2,084	1,476
...	...	...	...	...	...	...	...	...	...	...	...	...	...	312	133
...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,921	2,503
...	...	...	...	...	...	...	...	...	...	...	...	...	...	31	25
...	...	..	...	...	...	...	...	...	...	...	...	...	...	46,307	38,210
..	.	...	...	...	...	...	...	...	...	...	...	...	...	481,412	402,950

Deaths,  
363,069  
1,671

Percentage of case mortality.  
83.90  
70.63  
83.83

364,740

Serial No.	DISTRICTS.	JANUARY 1904.			FEBRUARY 1904.			MARCH 1904.			APRIL 1904.			MAY 1904.			JUNE 1904.		
		Inoculations.	Among inoculated persons.		Inoculations.	Among inoculated persons.		Inoculations.	Among inoculated persons.		Inoculations.	Among inoculated persons.		Inoculations.	Among inoculated persons.		Inoculations.	Among inoculated persons.	
			Attacks.	Deaths.		Attacks.	Deaths.		Attacks.	Deaths.		Attacks.	Deaths.		Attacks.	Deaths.		Attacks.	Deaths.
1	Hissar ...	64	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	
2	Rohtak ..	...	...	...	5	...	...	...	...	556	1	1	287	5	...	115	...	...	
3	Gurgaon ...	...	...	...	6	...	...	438	...	...	160	7	5	10	2	2	...	...	
4	Delhi ...	...	...	...	...	...	...	212	...	..	1	..	...	...	...	...	...	...	
5	Karnal ...	788	8	2	219	1	3	43	...	...	33	...	...	19	...	...	...	...	
6	Ambala ...	4,364	36	20	2,865	58	36	2,072	51	33	1,141	43	16	27	42	22	...	2	
7	Simla ...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	
8	Kangra ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
9	Hoshiarpur ...	814	3	2	976	...	...	3,507	33	12	1,897	297	155	1,147	978	654	134	544	
10	Jullundur ...	12	...	...	532	..	...	515	..	...	948	..	...	384	...	...	..	...	
11	Ludhiana ...	190	...	...	370	...	...	800	...	...	55	...	...	25	...	...	...	...	
12	Ferozepore ...	362	1	...	298	2	2	650	...	...	1,863	...	...	1,124	...	...	196	...	
13	Sialkot ...	14	...	...	...	...	...	2,319	...	...	1,683	...	...	894	...	...	...	...	
14	Gujranwala ...	...	...	...	...	...	...	130	...	...	4	...	...	152	...	...	...	...	
15	Montgomery ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
16	Lahore ...	...	...	...	4	...	...	291	...	...	12	...	...	62	...	...	...	...	
17	Amritsar ...	405	...	...	869	1	...	801	1	1	639	11	7	945	7	3	2	..	
18	Gurdaspur ...	...	...	...	624	..	...	116	70	70	346	46	46	13	...	...	...	...	
19	Gujrat ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
20	Shahpur ...	...	...	...	...	...	...	...	...	...	...	...	...	73	...	...	...	...	
21	Jhelum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
22	Rawalpindi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
23	Attock ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
24	Mianwali ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
25	Multan ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
26	Jhang ...	...	...	...	...	...	...	...	...	...	14	...	...	3	...	...	...	...	
27	D. G. Khan ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
28	Muzaffargarh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
29	Lyallpur ...	215	...	..	669	4	...	527	10	1	7	2	1	...	...	..	...	...	
	Total ...	7,228	48	24	7,438	66	41	12,333	165	117	9,359	407	231	5,165	1,034	681	447	546	
	NATIVE STATES.																		
	Patiala ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Nabha ...	...	...	...															



5

[illegible]

## III

ANNUAL RETURN OF DISINFECTION BY OFFICIAL AGENCY, OR BY MEANS OF DISINFECTING  
MACHINES OR DISINFECTORS OWNED BY GOVERNMENT OR LOCAL BODIES, FOR CALENDAR  
YEAR 1904.

Serial No.	NAME OF DISTRICT.			STEAM DISINFECT- ORS.	DESICCATION.			CHEMICAL DISINFEC- TION.		REMARKS.
				Number of days in which steam disinfecter was worked.	Number of desiccators in use.	Number of villages in which employed.	Number of rooms desiccated.	Number of villages in which chemical disinfection was carried out.	Number of rooms chemical- ly disinfected.	
1	Hissar	...	...	...	24	6	1,540	5	46	
2	Rohtak	...	...	...	9	38	937	11	251	
3	Gurgaon	...	...	...	14	10	490	3	79	
4	Delhi	...	...	...	3	5	446	1	524	
5	Karnal	...	...	...	2	2	46	4	1,088	
6	Ambala	...	...	...	209	126	3,857	2,829	1,288	
7	Simla	...	...	...	...	...	...	...	...	
8	Kangra	...	...	...	...	...	...	...	...	
9	Hoshiarpur	...	...	...	19	30	2,258	11	582	
10	Jullundur	...	...	...	31	18	1,973	...	893	
11	Ludhiana	...	...	2	...	86	181	33	1,184	
12	Ferozepur	...	...	...	29	14	258	6	23	
13	Sialkot	...	...	...	7	7	1,670	2	40	
14	Gujranwala	...	...	...	54	73	3,778	1	133	
15	Montgomery	...	...	...	15	48	2,040	1	50	
16	Lahore	...	...	3	65	17	857	7	3,217	
17	Amritsar	...	...	2	1,140	999	18,992	3	1,590	
18	Gurdaspur	...	...	...	19	16	947	22	372	
19	Gujrat	...	...	...	10	7	529	3	142	
20	Shahpur	...	...	...	31	112	2,939	22	3,443	
21	Jhelum	...	...	...	...	2	956	3	2,983	
22	Rawalpindi	...	...	161	8	118	1,846	188	8,375	
23	Attock	...	...	...	1	1	6	5	14	
24	Mianwali	...	...	...	...	...	...	...	...	
25	Multan	...	...	...	4	3	45	3	41	
26	Jhang	...	...	...	25	6	1,479	5	1,880	
27	Dera Ghazi Khan	...	...	...	...	...	...	3	220	
28	Muzaffargarh	...	...	...	...	...	...	...	...	
29	Lyallpur	...	...	...	14	24	1,263	6	431	
TOTAL				168	1,733	1,768	49,333	3,177	28,889	



## IV.

STATEMENT SHOWING PLAGUE EXPENDITURE INCURRED DURING 1904, UNDER EACH  
HEAD OF ACCOUNT AS DETAIL ED BELOW.

Heads of accounts.	Rs.	A.	P.
<i>I.—Administration.</i>			
Salary of Chief Plague Medical Officer, Punjab, including exchange compensation allowance.	13,237	8	0
Pay of Chief Plague Medical Officer's office establishment ... ..	7,177	9	8
Travelling allowance of Chief Plague Medical Officer and his establishment, including hill journey allowance.	2,003	6	0
Chief Plague Medical Officer's office contingencies ... ..	2,509	2	6
<i>II.—General.</i>			
Salary of Commissioned Medical Officers, including exchange compensation...	21,876	11	11
" Special Medical Officers ... ..	52,804	7	3
" permanant Assistant Surgeons ... ..	2,123	7	10
" temporary " " ... ..	33,291	9	5
" Hospital Assistants ... ..	18,534	15	8
" Compounders ... ..	1,416	1	2
" Dhais ... ..	363	4	5
" vaccination establishment ... ..	70	12	5
" Clerks ... ..	11,921	2	9
" servants ... ..	4,032	13	4
Travelling allowance of officers ... ..	28,107	1	0
" " establishment ... ..	6,761	12	9
Compensation for dearness of food ... ..	25	10	9
Rewards ... ..	4,223	0	0
Contingencies of the offices of District Plague Medical Officers ... ..	9,691	10	4
Grants to Malba Fund ... ..	50	0	0
<i>III.—Isolation, segregation and evacuation.</i>			
(Miscellaneous) ... ..	785	12	5
<i>IV.—Disinfection.</i>			
Pay of mates (Jullundur Disinfection Depot) ... ..	749	11	3
" " (District) ... ..	1,576	11	9
" Mistris for desiccation ... ..	51	7	4
Cost, carriage, working and repairs of desiccators ... ..	12,305	12	8
Cost and carriage of disinfectants and cost, carriage and repairs of appliances for chemical disinfection.	7,930	7	4
Daily labour ... ..	1,792	11	5
Miscellaneous ... ..	2,358	0	0
<i>V.—Steam Disinfectors.</i>			
Pay of engineering staff ... ..	266	0	0
Cost of Steam Disinfectors ... ..	121	0	5
Erection, working and repairs of Steam Disinfectors ... ..	12,260	0	9
Carriage of Steam Disinfector ... ..	508	14	7
Miscellaneous ... ..	1,262	5	0
<i>VI.—Inoculation.</i>			
Pay of clerks ... ..	450	0	0
" servants ... ..	192	0	0
Cost of fluid ... ..	1,666	9	0
Purchase of instruments and medicines ... ..	650	7	6
Carriage of fluid, instruments and medicines ... ..	1,729	12	10
<i>VII.—Inspection Posts and Pilgrim Camps.</i>			
Pay of servants ... ..	3,964	8	10
Miscellaneous ... ..	75,515	1	2
Total ... ..	3,46,359	9	5







